

THE ULTIMATE GUIDE TO MINECRAFT



MASTER THE CRAFT

Take Minecraft
to the next
level!

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MODS & MAPS YOU NEED

See the best user
creations and builds

**FEAR NO
MONSTER!**

**SURVIVE YOUR
FIRST NIGHT**

**HOW TO ESCAPE
ANY DISASTER!**

AND MORE!

Future

Special #4

The Future of Minecraft

◆ MICROSOFT BUYOUT ◆ WHAT NEXT FOR NOTCH? ◆ WHAT IT MEANS FOR YOU

FEATURING



CONQUER BIOMES

Learn how to make the
world work for you



GET A COOL NEW LOOK

The best texture packs,
skins and more



MODDING TIPS

Comprehensive
beginner's guide

THE ULTIMATE GUIDE TO MINECRAFT

SPRING 2015

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Fun cubed

We're coming to you after what has to be the biggest period of change in Minecraft's history, or at least since the game officially launched in 2011. The staggering amount of money Microsoft handed over for Mojang testifies to just how huge the game has become. This isn't a game, any more. It's a hobby, a lifestyle, a business phenomenon, a community.

Well, that's not quite right. It is still a game, after all, and over the following pages we're going to teach you how to get the most out of it. Whether you're a veteran crafter or mines or you're just starting out on your journey, we hope you'll find something here to help you build bigger, stay safer, and explore more extensively. You're about to enter a bigger, blockier world, and it's our privilege to be your guides. Enjoy!

Chris

CHRIS THURSTEN
EDITOR

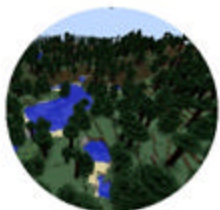
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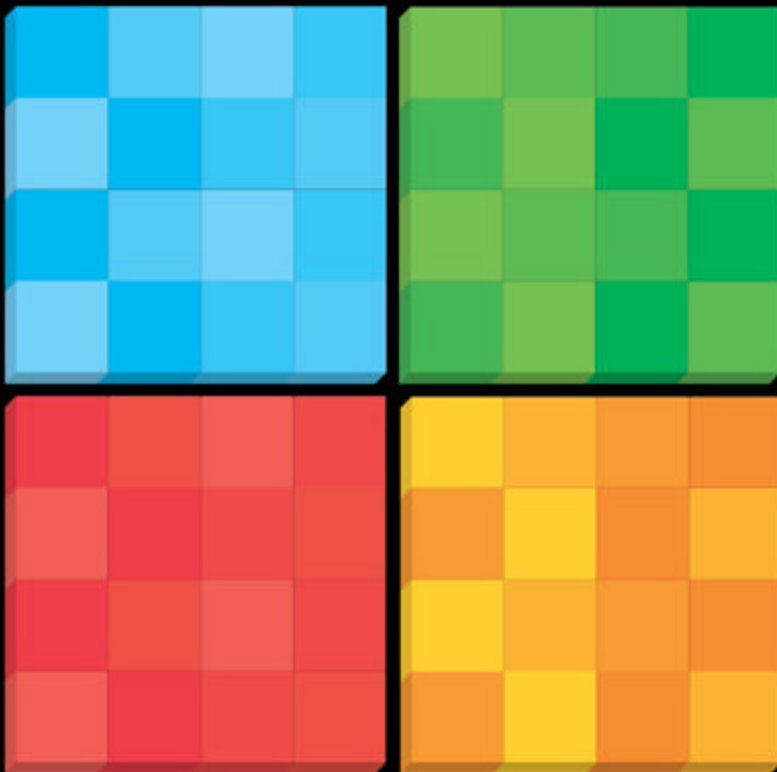
From crafting tools and baking cakes to conquering creatures, here's what you need to know.



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It all starts here. Be sure you see dawn with your health and dignity intact with our guide.



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Fallen in lava? Spiders on the roof? We've all been there. Don't panic! Help is on the way.



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Billions spent, but what does it mean for players?



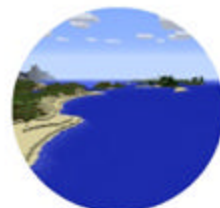
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Mastered *Minecraft*? More creativity and survival awaits you elsewhere on PC!

WHAT IS MINECRAFT?

M

inecraft is an open-world sandbox exploration and building game that lets you go where you want, build what you want, and set your own goals. The game's procedurally-generated environments are full of raw materials, distinct environments and animals. You can create everything from a humble ranch house to a giant castle to a massive city of skyscrapers.

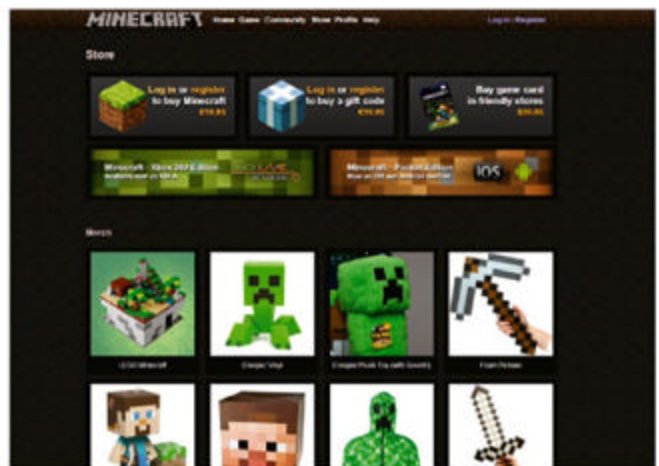
There are PS4, Xbox One, PC, PS3, Xbox 360, PS Vita, iOS and Android versions of the game. To make things more complicated, each format contains different features—while this issue focuses on the PC version, many of the things we'll teach you are platform-agnostic. Some of the creatures and items we'll cover are PC-only for now, but it's worth absorbing the info if you're a console player, as you never know what a future update may bring.

BASIC SETUP



1 Locate the game

On PC, go to the official website: www.minecraft.net. Don't want to buy it digitally? You can buy a boxed copy for consoles, or a physical download code, from gaming stores.



2 Purchasing

You'll need an account along with payment information to purchase the game. On PC, buy it from www.minecraft.net/store and then download it from www.minecraft.net/download.

HOW TO PLAY

There are a lot of ways to play *Minecraft*, and the best part is that how you play is up to you. Do whatever sounds fun—start new worlds on a whim if you're bored with your current project. Below are some of our favorite ways to play:

INVENTOR

Use *Minecraft*'s redstone ore to lay out electrical circuits such as self-opening doors. You can even build automated train cars or farms that mechanically harvest themselves at the push of a button.

NOMAD

Don't settle down and mine for ore, hit the trail instead. With basic tools and food that you can forage, explore the wilderness.

HOMEMAKER

Set up a house or a mansion and stock it with a kitchen, library, bedrooms and gardens. Build your

dream house into the side of a mountain or on a private beach.

RANCHER

Set up pens and breed animals until you have a huge herd. On PC you can keep a stable of horses for travel and ride off into the sunset for an adventure now and then.

COMMUNITY PLANNER

Find a small village of NPCs and transform their sleepy hamlet into a metropolis. Widen roads, add neighborhoods and expand their farms. The population will rise as you add more buildings.

PETTYLORD

Find a tall hill and plop a castle down on top of it. High stone walls, gates with trapdoors and a secluded keep can be yours to rule over. Got the Game of Thrones urge? Then destroy villages, too, before suddenly dying.

ARTIST

Start Creative mode and use the different colors of wool and rock to build towering pixel art. Statues and recreations of famous landmarks are fun, as are 8-bit art recreations of game characters.

DWARVEN MINER

Knock a hole in the side of a mountain and never look back. Place soil and streams to farm underground and build a secluded city entirely inside a hollow mountain. Watch out for Smaug!

ANDREW RYAN

Swim into the middle of the ocean and dive straight down. Building glass domes can take a long time, but as you already know: "A man builds. A parasite asks 'Where is my share?'" Build, then. Build your paradise. For your next trick, build a city in the clouds.

GAME MODES

A what's what of *Minecraft*'s options

1

The main mode is Survival. Here you'll be free to explore your world and gather resources for crafting, but deadly mobs will attack at night and when you're deep underground.

2

Creative mode is where you can flex your masonry muscles. No bad guys here—and you've got access to all the resources to build and build.

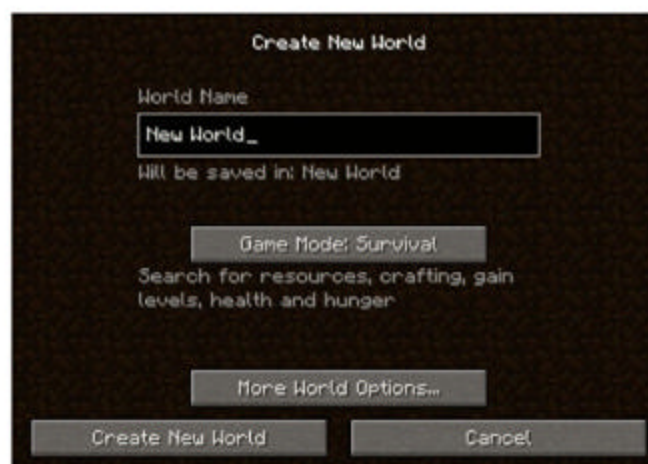
3

On PC? Good news! You can also try Adventure, Hardcore and Spectator modes. The former downplays building in favor of RPG-style storytelling. Hardcore mode deletes the map when you die, and Spectator allows you to float around as an invisible camera.



3 Launch it

You'll need to install the game after downloading it. Then log into the launcher with your new account before hitting the all-important 'play'. You're most of the way there!



4 Play

Start playing! Over the following pages you'll find all the information you need to get off to a great start. You can learn as you go, too, and come back to us when you get into trouble.

KNOW YOUR BIOMES



The PC version features a Savanna plains variant that appears on plateaus and has numerous trees.

You'll often find shallow waterholes, which are good sources of sugarcane or clay.

T

he great, open grassy expanses on *Minecraft* are excellent places for finding cows, sheep and pigs to slaughter for meat (and horses

in the PC version), as well as flowers for dyes and grass for wheat seeds. They're the perfect place to set up farms to gather resources as livestock is easy to lure back and pen in. The open landscape makes it easier to spot enemies nearby, too, which make plains great places for building.

PLAINS

Yellow and red flowers are common here and can be used to create dyes. Use these directly on sheep to make your own brightly colored flocks.

SURVIVE YOUR FIRST NIGHT



Don't go it alone—we'll help you
see daylight again after the first
bumpy, mob-filled evening



M

any games start off
with a lengthy
tutorial process that

introduces the core rules,
mechanics, and controls of the
experience, all while easing you
into dangerous new scenarios.
In *Minecraft*, you're completely
on your own in the pixel-block
wilderness from the start.

When you start up a new
world in Survival mode, you'll
emerge into daylight within a
randomly generated block
environment with absolutely
zero guidance on what to do
next. *Minecraft*'s open world
design provides ample

opportunity to play the game
your own way, and your built-in
survival instincts might help
point you in the right direction.

But when night falls and the
hostile mobs start honing in on
your position, any previous lack
of initiative will come back to
haunt you. If you're new to
Minecraft and need a helping
hand when it comes to setting
up shelter, building initial tools,
and figuring out the basics of
crafting—all within a tiny
window of time—here's our
guide to surviving your first
night in a brand new world.

Good luck, have fun!

SURVIVE YOUR FIRST NIGHT

As awe-inspiring as your new world may be, there's precious little time to waste. Find a spot to set up shelter to survive.



YOUR FIRST STEPS

W

hen you start a new game of Survival, you can choose to automatically generate a world or enter a string of letters or numbers to create a 'seed', which you can use again later to recreate the same world. Whatever the case, you'll quickly be dropped straight into the world with no items, clear objectives, or text prompts to help you.

Before you wander off, look around and scope out your surroundings. If you see high

ground nearby, it's worth climbing up in order to get a better look at the area. Be incredibly swift, though—daylight only lasts for about ten minutes of real world time, and then you'll have the same amount of night to deal with.

What's the difference? Day isn't inhabited by explosive creepers, arrow-flinging skeletons, zombies, and squirming spiders, among other horrors.

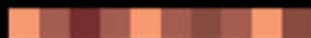
Within that first minute or two, you should have an idea of where you'd like to set up shelter in the world. It's worth doing so

near the spawn point, so if you die, you'll be able to quickly return to your homestead—and that makes sense for the timeframe, as well, since you'll need to start building as soon as you possibly can.

One smart plan for your first shelter is to build into a hillside, like a hobbit. Not only does that mean that you'll have fewer walls to construct because the hillside acts as interior walls, but hillside abodes are also more difficult for enemies to reach. Freestanding structures require more building, and thus take more time to complete.



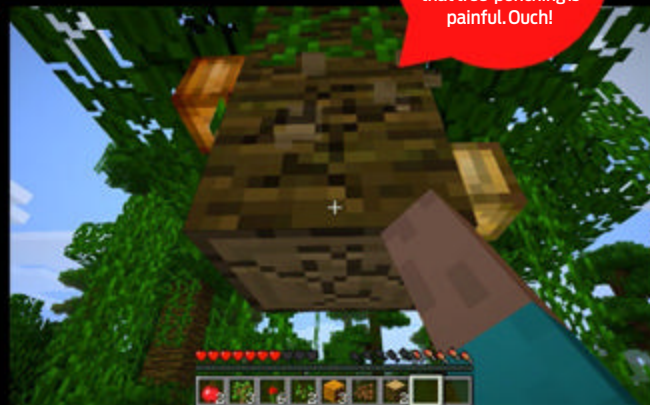
BUILD A HOME



Dirt can be used to build your shelter and should be readily available all around you, but it's unreliable and very susceptible to enemy attack. It's dirt, after all.

Considering the short amount of time you have before the creatures begin to roam, your best bet is to craft wood planks from basic wood, which you'll need to find from nearby trees. It's easy: just aim your fists at any block in the trunk—regardless of tree color—and punch it repeatedly.

It'll take a few seconds, but then you'll have your very own wood block. It's a start! Each block of wood can be used to craft four wood planks, and you'll likely need several dozen planks to construct a small shelter. You'll also need wood to



Don't try this at home: after office experimentation we can categorically state that tree-punching is painful. Ouch!

construct a crafting table, pickaxe and torches shortly after the home is complete, so grab as much as you possibly can from the start. It's worth pulling all of the wood from four or five nearby trees in a hurry to ensure that you're all set for now.

Pro tip: don't miss the higher-up tree blocks once

you've punched through the lower ones. Simply go below the tree, look up, and keep punching until all of the reachable wood blocks are yours. Take that, gravity!

Now pull up your crafting menu and quickly change your base wood blocks into wood planks. You should have a large stack of planks now, so if you're building a standalone shelter, start placing them in a square or rectangle-like outline with one block left open for an entrance.

At first, you'll want enough room to hold a crafting table, a furnace and an opening to a mine that you'll carve out shortly thereafter (what would a *Minecraft* home be without a mine?), so give yourself a little bit of room. An 8x6 layout that's three blocks high should be plenty of space for your first home. Leave the roof until last: you can fill it in when night falls.



Try to dig your first foundations high up on a hill for the best survival odds.

SURVIVE YOUR FIRST NIGHT



The wooden pickaxe should be the first tool you craft: it'll make mining important cobblestone much faster than it was before.





TOOLS OF THE TRADE



Get the foundations of your house down nice and early to avoid dusk panic.

B

y the time you finish the basic outline of your shelter, you might have a couple minutes left before the sun begins to set. Hopefully you'll have a few wooden planks left—four of them can be used in the standard crafting menu to create a crafting table, which opens up a huge array of building possibilities.

The larger 3x3 crafting grid of the table lets you build essential tools and weapons that'll help you begin mining for resources and fighting back against enemies. First place the crafting table inside your shelter, and follow-up by crafting four sticks (each stick

requires two wood planks).

Once you have those, you can create your first tool: the wooden pickaxe. It's a huge first step towards accessing the whole mining aspect of *Minecraft*, and you build it by combining three wood planks with two sticks on the table. (On PC it's a little more complex as the planks must be slotted into the top row and the two sticks below it in the center column, similar to the shape of the pickaxe itself.)

If you've managed to accomplish all of that with even a smidgen of daylight still in sight, you're doing an excellent job—but there's one more important task you must complete even if the darkness has already set in. No arguing!

Building a furnace lets you cook meat to fill your belly, create charcoal to help craft torches, and smelt other resources for various needs down the line. Plus, it's nice to have heat, isn't it?

It takes eight blocks of cobblestone to craft a furnace with the crafting table, so make a mad dash toward the nearest batch of grey blocks you can see. If you're near mountains you should find some immediately. If not, start digging into the earth in a staircase-like pattern and see what you can find.

Once you have the blocks you need, use the table (leaving the middle square empty) and then place the furnace inside your shelter for a cosy night.



SURVIVE AND PROSPER



Who's the idiot who said this night was going to be cosy, eh? Once darkness falls, things get

dangerous fast. Your absolute safest bet is to seal yourself within your shelter by closing off all entrances.

It's not necessarily the most exciting way to spend the next ten minutes, we'll admit. Some might even call it cowardly. But at least you'll have the morning to look forward to.

Be sure to craft a few torches using sticks and charcoal and place at least one inside the structure—otherwise you'll be sitting in total darkness, which is equally terrifying and depressing. Also, if you happen

to have three wood planks and manage to find and kill three sheep to gather up some wool, you can create a bed via the crafting table and skip the night altogether through the ancient technique known as 'sleep'.

If you're feeling a bit more adventurous, you can venture out into the darkness to explore the land, find resource-rich areas to mine and discover various animals to claim meat and materials from. Always be aware of your surroundings, though, and if you see enemies in pursuit, don't stop running!

You can craft a sword with two wood or cobblestone blocks and a stick, which will give you a better chance to fight back against the likes of skeletons and spiders. Not the green

creepers, however — they'll simply explode when near. Should you take damage, be sure to eat some food; when your hunger bar's full, health your will regenerate.

Staying put in your shelter doesn't have to be completely uneventful, though. You can play around with the crafting table and furnace to try and generate unique outcomes, and use the materials you already have to create an axe, a hoe and a shovel to aid your further adventures. Better yet, you can start digging downward to begin the arduous—but eventually rewarding—process of mining materials.

There are all sorts of minerals and other surprises beneath the earth, and starting your descent

from within the shelter affords you a level of safety while exploring the depths.

Ultimately, the most important thing is to see the morning light, at which point you can safely return to the outside world play the game however you choose.

If you've followed this guide closely, you should now have a sense of the fundamentals of the Survival experience and the tools you need to continue your adventure from here.

If you ignored everything and are stuck without a shelter as night falls, you can dig a hole straight down and place a block directly above your head to close the gap. You should have no problem surviving the night in entombed shame.

SURVIVE YOUR FIRST NIGHT

Know this: creepers explode. Take our word for it and never get that close. First-hand verification of their attack method hurts.



You died!

Score: 0

Respawn

Title screen

Sigh— somebody clearly wasn't paying attention to our advice. Try again!

A torch will make night pass more smoothly. Don't worry - your home won't burn!



If the sun's this low and you've yet to start building, start digging! Safety beats dignity.



KNOW YOUR BIOMES



Sometimes apples will fall from cut trees. They're great for relieving hunger if you can't find any pigs. Or if you're vegan.

You'll sometimes find mushrooms under certain tree canopies, vital for making mushroom soup. Obviously.



Forest biomes are often small, so be sure to replant a tree every time you cut one down to ensure you don't exhaust your wood supplies.

FOREST

F

illed with precious wood, vital for making tools and the workbench early in the game, forests are the best place to start out. Be careful

though as they're often hilly and dark, with dangerous monsters spawning under the leafy branches. They're especially difficult to navigate at night as the trees can obscure your vision, so creepers become much harder to spot and can easily sneak up on you. BOOM!

MASTER

So you've survived your first night?



THE BASICS

Now it's time to get your teeth into **MINECRAFT** for real!



M

Maybe you picked up this guide because you love *Minecraft*: you've been playing since 2010 and can't get enough. In that case, treat this section as a refresher course—give it a skim, then jump ahead to our advanced guides later on.

But if you're reading because you've heard your friends talking about *Minecraft* and want to join in, or you've already

taken your first, perilous steps into blockland but were totally lost, get studying.

Minecraft is a complex game, but as noted in the survival guide before this, it doesn't do much to ease new players in. To live a long, full life in your pixelly new surroundings, you need to know how to craft items, breed animals, deal with monsters, and more.

It can be overwhelming, so we've made it simple—on the pages ahead you'll find everything you need to know to not only survive, but to start the long journey to becoming a *Minecraft* master.

Turn the page for tips on crafting your first bits of gear, and keep flipping for *Minecraft* zoology, monster control and much, much more.

CRAFTING GUIDE

Torches, armor, cakes and more!



If you've survived your first night you're now ready to get cracking on the 'craft' portion of *Minecraft*. This guide will provide a handy reference to most of the basic materials and recipes you'll need for a strong start come your first morning.

EQUIPMENT AND MATERIALS

Tools, weapons, and armor are some of the most fundamental items you can make. They're constructed from different materials, which influence their durability and effectiveness. Before you start crafting, then, take a good look at the stuff you're going to need.

Wood



Wood can be found in almost every biome (with deserts being the exception), and is needed for almost any basic recipe. It is the second-weakest material for making tools and weapons, yielding a sword that will break after dealing about 400 damage.

Stone



For beginning miners, stone is the most common block to find beneath the surface. You can use it to construct medium durability tools and weapons. A stone sword will break after dealing about 1000 points of damage—more than twice that of wood.

Gold



Gold is a rare ore found only in the lowest 32 layers of the world, meaning you'll have to dig for a while to find it. It is the weakest material to make tools, weapons, and armor from. Instead, save it for more valuable projects such as powered minecart rails.

Iron



Iron is a sturdy, uncommon material that can be found underground up to 63 layers above bedrock, meaning you shouldn't have to dig too deep to find it. It yields a sword that will break after dealing about 2200 points of damage.

Diamond



Diamond can only be found in the bottom eight layers of the map. It can take hours to find enough diamond to craft with, but it's worth it. Why? Well, a diamond pick can break any block type except obsidian in under one second. Swords are formidable, too.

RECIPES

ESSENTIAL TOOLS

Never leave home without this must-have gear. Here's how to build the tools you'll need out in the wilderness.



Torch

Ingredients
1 wooden stick + 1 coal

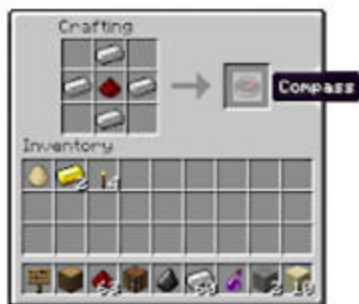
Torches are among the most important tools in the game for one reason: they prevent most monsters from spawning. The coal component can be mined, or created in a furnace by burning uncut wood.



Flint

Ingredients
1 flint + 1 steel ingot

Other than by pouring buckets of lava on everything like a caveman, flint and an iron ingot are what you'll need to light things on fire. The flint in the recipe can be earned by breaking gravel blocks with a shovel.



Compass

Ingredients
1 redstone + 4 iron ingots

A compass will point you toward your original spawn point, which can be useful for finding your way back to home base. Redstone can only be found in ore veins deep underground. Something of a luxury item, but good to have.



Ladder

Ingredients
7 wooden sticks

Each time you craft this recipe you'll produce three sections of ladder, which can be placed against a flat surface to assist in climbing. This is especially helpful as a quick way to the surface when exploring caves.

RECIPES

SUITS OF ARMOR

Armor reduces the damage you take from enemy attacks, and might save your life when a monster catches you off-guard.



Helmet

Ingredients
5 base material

A helmet provides 1-3 points of protection. Pumpkins can also be equipped as helmets, but they don't have any armor value. They don't take damage either, though, so you can be a pumpkin head forever.



Chestplate

Ingredients
8 base material

A chestplate provides 3-8 points of protection. If you use leather instead, it'll be called a 'tunic'. In fact, all leather armor except boots has a different name: 'cap' instead of 'helmet' and 'pants' instead of 'leggings'. The more you know.



Leggings

Ingredients
7 base material

Leggings provide 2-6 points of protection. Nothing about 'iron leggings' sounds very comfortable or practical, but your mobility won't be hindered by stomping around in solid metal trousers, thankfully.



Boots

Ingredients
4 base material

Boots provide 1-3 points of protection. It's also a generally good idea to have a nice, comfortable pair of boots for adventuring, unless you want pixel blisters. (That doesn't really happen in *Minecraft*—it's just good life advice.)



Full diamond and anvil

Once you're fully decked out in diamond, you can have as much as 20 points of armor. That's enough to reduce all enemy damage by 80%! Armor and weapons degrade over time, though, so you may want to build an anvil (4 iron ingots, 3 iron blocks), which allows you to use raw materials to repair the durability of your items.



Armored horse

Horse armor can't be crafted (yet), but you can find it in dungeons, temples, Nether fortresses, and NPC villages. It will offer your faithful steed 5-11 points of protection and, more importantly, help its regalia match your own.

BAKE A CAKE!

Your plan for the perfect dessert.

1

Build buckets

Ingredients

3 iron ingots per bucket

First, you'll need to make three iron buckets (a total of nine ingots) to collect milk. Milk, of course, comes from cows, which can be found in just about any biome with lots of grass. Just interact with the cow using the bucket to get milk.

Next, you'll need eggs, which spawn under chickens. You should be able to find chickens in the same general areas as cows.

Finally, you're going to need some wheat. First, find some tall grass and punch it until you get some seeds. Once you have your seeds, it's time to craft a hoe so you can till the earth to grow wheat.

2

Craft a hoe

Ingredients

2 wooden sticks + 2 iron ingots

We've used iron here, but you can also make a hoe with wood planks, stone, gold, or diamond. Use the hoe on the ground to create farmland, then select the turf with your seeds to plant them. The wheat will take a while to grow — it will need light, and will grow faster if it is within a couple tiles of a water block so be careful where you place it. Lastly, you'll need some sugar, which is crafted from sugar cane. You should be able to find sugar cane growing along most large rivers and lakes.

Once you have all the ingredients ready, it's off to the kitchen!

3

Bake the cake

Ingredients

3 buckets of milk + 2 sugar + 1 egg + 3 wheat

Behold! Cake! Each cake is good for 6 servings, which will restore one point of hunger. See! It isn't a lie!

Cocoa pods found here have three growth stages. The longer you leave them, the more beans they'll drop.

JUNGLE

J

ungles are the lushest of all the *Minecraft* biomes and are home to imposingly tall trees draped with vines. You can climb them

for adventures—or harvest them to decorate your own home. Rare flora such as cocoa pods and melons spawn here and you can also find ocelots that can be tamed and used to scare off creepers. In the PC and console versions you'll also find jungle temples that contain a puzzle to open a secret loot-filled room.

A screenshot from the game Minecraft showing a lush forest. In the foreground, a staircase made of stone blocks leads up a grassy hill. Several large, leafy trees with brown trunks are scattered throughout the scene. The sky is a clear blue. Two orange speech bubbles contain text about climbing trees and taming ocelots.

Climbing
to the top of
the trees provides
some of the best
vantage points in the
game.

You'll
need a raw
fish to tame the
ocelots and turn
them into helpful
house cats.

POTIONS GUIDE

Boil and bubble, have no trouble...

B

rewing potions is one of the most useful advanced disciplines to learn in *Minecraft*. The

recipes may seem simple, but most will require you to search the far-flung corners of the Overworld and the Nether, slaying and sidestepping dangerous creatures. Here's how:



SETTING UP

Make a brewing stand, a cauldron and a lot of glass bottles. Fill the cauldron with water, transfer that water over to three bottles and then put them into the stand.



CONSERVING INGREDIENTS

Where possible, fill the stand with bottles. Potions aren't expensive, but when each ingredient distills into three bottles, it's silly to waste space. Stick a stack of sand in a furnace to ensure you have enough glass for it all.



WARTS AND ALL

Nether Wart turns water bottles into Awkward Potions, the awkwardly named base for all the best effects. Bring back some Soul Sand too, as you can use it to plant a Nether Wart garden for an infinite supply.



FUNDAMENTAL ALCHEMY

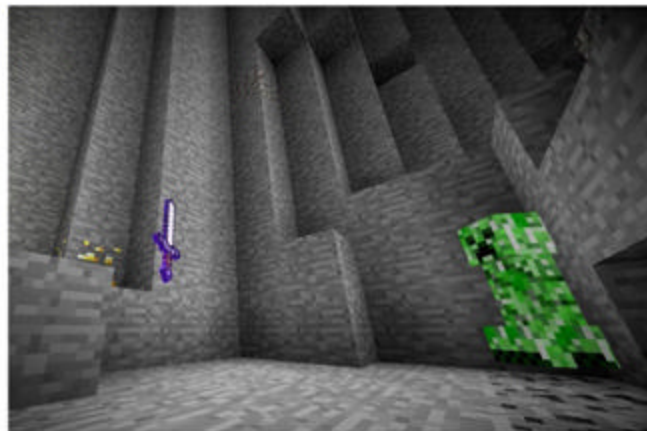
For an instant healing potion, add a Glistening Melon — created by combining a slice of melon with a gold nugget. Drinking these concoctions will restore two hearts each, though there are more efficient ways of getting back into fighting shape.

Swap out the Glistening Melon for a Ghost Tear, and you'll get a Potion of Regeneration that will heal you for one heart every two and a half seconds for 45 seconds. This is vastly superior for lengthy combat, as the net healing effect is over nine times that of a healing potion.

Getting those Ghost Tears is tough, and it'll take serious speed to harvest them without dying. A simple brew of sugar will create a Potion of Swiftness, increasing your speed, jumping power and field of vision for three minutes.

If you're just looking for more stopping power, brew up some Blaze Powder for a Potion of Strength, which more than doubles the power of every melee attack you make against enemies.

But don't leave without a Potion of Night Vision, which does away with the need for torches. You can brew one using a golden carrot, which is a normal carrot encircled by eight gold nuggets.



KICKING IT UP A NOTCH

Standard potions not doing it for you? Adding a third ingredient to a pre-brewed potion can give you an even more potent effect.

Weaponize any potion by adding a creeper's gunpowder as an ingredient. It will create a splash potion, which can be fired like any ranged weapon for devastating debuffs or, if you're playing with friends, helpful group healing.

Give yourself some extra time to breathe by adding Redstone Dust to any potion with a limited duration, increasing the time for the effect to wear off.

Glowstone Dust, harvested from Glowstone found in the Nether, can

amplify the potency of a potion, but it also reduces the duration. For example, adding Glowstone dust to a Potion of Regeneration will double the rate of regeneration it grants you, but also cuts the duration to a mere 16 seconds.

Fermented Spider Eye, which is exactly what it sounds like, will reverse the effect of a potion in some way. Adding it to a Potion of Healing will create a Potion of Harming... which can be combined with gunpowder to make a damaging grenade. Adding it to a Potion of Night Vision will create a Potion of Invisibility. Which doesn't make sense, but let's go with it.

MONSTERS GUIDE

How to co-exist. Or conquer!



raversing the dark corners of *Minecraft* risks death at the blocky fists many nefarious beasts, and your most important weapon in the fight for survival is knowledge of what creatures might be lurking just around the next bend in the cave.



Zombie

Health 10 Exp 5

ENCOUNTERED In low light: the overworld after sun down, poorly-lit structures, and caves. So, everywhere.

SPECIAL ABILITIES If a villager mob is killed by a zombie, it can rise as a hostile zombie villager. You will also occasionally run into zombies with weapons and armor.

WEAKNESSES Like all undead, zombies burn up in sunlight. They also move very slowly. An iron sword and armor should be more than enough, depending on whether or not the zombie has equipment of its own. Bows also work, as zombies have no ranged attack.



Blaze

Health 10 Exp 10

ENCOUNTERED Only in Nether Fortresses.

SPECIAL ABILITIES While not as tough as a ghast, they are much faster and smaller (making them harder to hit). They shoot non-explosive fire projectiles at you in quick, machine-gun-like bursts. Getting hit by these projectiles will, understandably, light you on fire.

WEAKNESSES Know that saying about “a snowball’s chance in hell?” When you’re fighting blazes, that chance is actually pretty good. Weaponized snow doesn’t hurt as much as arrows, but can be fired much faster. Packing powder is a great technique.

Spider

Health 16 Exp 5

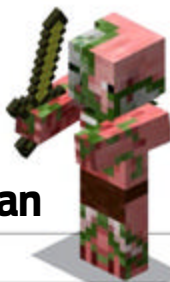


ENCOUNTERED Spiders only spawn in low-light areas, but can wander out into the sun without taking damage.

SPECIAL ABILITIES Spiders can climb up smooth walls and fit inside two-block-wide by one-block-high openings, which the player and other mobs can't. This is important to know when designing shelters. Spiders also have a lunging jump attack that can take you off guard.

WEAKNESSES Bows are a good way to deal with spiders, since engaging them close-up puts you in range of their jump attack. It's also possible to knock one off of a surface while it's climbing, and let the fall damage do the work.

VARIANTS A more dangerous version of this mob, the Cave Spider, only spawns deep underground. Its bite is highly poisonous. Bring curative milk just to be sure.



Zombie Pigman

Health 10 Exp 5

ENCOUNTERED Zombie pigmen only spawn in the Nether dimension, and usually in groups.

SPECIAL ABILITIES ZPs come armed with a sword, and are the only undead mob that doesn't burn up in sunlight. Like wolves, attacking one of them will alert all of its nearby friends to come to its aid.

WEAKNESSES If you can't just avoid them, fighting zombie pigmen is almost the same as fighting zombies, but their attacks do much more damage. Before the battle starts, make sure you have a narrow place to retreat to so they can't all gang up on you from different angles.

Skeleton

Health 10 Exp 5



ENCOUNTERED Skeletons spawn in the same conditions as zombies.

SPECIAL ABILITIES Skeletons come equipped with a bow, allowing them to attack you from range with terrifying accuracy. You might also encounter one riding on the back of a spider. Beware the bone cavalry!

WEAKNESSES As undead creatures, skeletons burn up in sunlight. If death by solar radiation isn't an option, it's best to meet them on their own terms with either a bow or thrown potions, as getting close enough to attack with a sword and not being hit by arrows can be challenging.

VARIANTS A special type of skeleton called a Wither Skeleton only spawns in fortresses deep in the Nether dimension. They carry swords instead of bows, and their attacks can place a damaging curse on you.



Enderman

Health 20 Exp 5

ENCOUNTERED Endermen spawn in the same conditions as zombies—albeit rarely—and frequently in The End.

SPECIAL ABILITIES Endermen can pick up and move blocks, as well as teleport great distances in any direction. They can usually teleport away faster than you can strike at them, and will tend to appear behind you for a sneak counter-attack.

WEAKNESSES Endermen generally only attack if you attack first or if you look directly at them. Their biggest weakness is water. They will usually be killed if caught out in a rainstorm, and will retreat if the player hides in a lake or river.

Creeper

Health 10 **Exp** 5



ENCOUNTERED *Minecraft's* most iconic mad bombers spawn in the same low-light conditions as zombies.

SPECIAL ABILITIES Its only means of attack is blowing itself up. They are completely silent until just before they detonate. Hsssss...

WEAKNESSES If a creeper never gets close enough to detonate, it's harmless. Ranged weapons are useful, but the best defence is being aware of your surroundings.

Wolf

Health 8 **Exp** 1-3



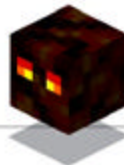
ENCOUNTERED Wolves usually spawn in packs in forested areas, and can spawn at any time.

SPECIAL ABILITIES Wolves are very fast, and have a forward leap attack much like a spider. If one wolf in a group is angered, the rest of the pack will help it deal with the threat.

WEAKNESSES Wolves aren't hostile to players unless attacked. In fact, they can be tamed by feeding them bones, turning them into allies. Wild wolves will attack livestock unprovoked, however, and thus can be a danger to your cattle.

Magma Cube

Health 16 (large), 4 (small), 1 (tiny)
Exp 4 (large), 2 (small), 1 (tiny)



ENCOUNTERED Mercifully, only in the Nether.

SPECIAL ABILITIES The magma cube is the slime from hell. They come in multiple sizes, like slimes, and the bigger ones split into two smaller ones when destroyed. To make it worse, they're also immune to fire.

WEAKNESSES None, really. Sniping with a bow from safely beyond their jumping range, or a custom-made bunker, is probably your best bet.

Witch

Health 13 **Exp** 5



ENCOUNTERED Witches dwell in witch huts, which only appear in swamp biomes.

SPECIAL ABILITIES Witches make use of potions, allowing them to heal themselves while damaging and debuffing the player. They can also increase their speed and become immune to fire.

WEAKNESSES Witches have no melee attack, and their potions have a much shorter range than a bow. Ranged combat is your best bet, and be sure to bring some helpful potions of your own.

Slime

Health 16 (large), 4 (small), 1 (tiny)
Exp 4 (large), 2 (small), 1 (tiny)



ENCOUNTERED In swamp biomes and underground.

SPECIAL ABILITIES Slimes come in three sizes. Large slimes split into two medium slimes when destroyed, and medium slimes split into two small slimes. You also can't prevent from spawning by manipulating the environment.

WEAKNESSES Slimes will always follow the shortest path to the player, and they can drown.

Ghast

Health 10 **Exp** 5



ENCOUNTERED Only in the Nether.

SPECIAL ABILITIES Ghasts are giant, flying ghost squids that shoot exploding fireballs at you. These not only deal damage, but can destroy the terrain around you. Thankfully, ghasts have relatively low health.

WEAKNESSES Cover is useless, since ghasts can just blow it up. Your best bet is speed: take a shot and then get out of the way before its explosive fireball lands. Use speed potions.

ENCHANTMENTS GUIDE

Harness ancient powers to create marginally stronger shovels



POWER UP

The maximum level cost for enchantments is 30, but on its own the enchantment table can only perform Level 8 upgrades. To enhance it you need 15 bookshelves, positioned around the table.



LUCK OF THE DRAW

Drop a weapon or armor in an enchanting table and you'll be given three random options. Each enchantment costs levels, which are earned from XP orbs dropped when you kill a monster. Higher level enchantments cost more levels.



LEVEL CURVE

The higher your level, the more XP it takes to level up. So if you're level 40 and buy two level 20 enchantments, one of them has cost exponentially more XP than the other. To enchant efficiently, try taking something to the table every time you hit level 30.

BY YOUR POWERS COMBINED...

Unlike potion effects, you don't necessarily have to settle for just one enchant on an item. It's possible to get two by using an anvil. When two items of different types are placed on an anvil, combining them will create an item with both enchants. Not all combinations are allowed, however, and you will have to pay an experience cost to create the combined enchant.

EXAMPLE ENCHANTMENTS

Weapon enchantments are fairly straightforward, with many of them increasing damage per level against specific enemy types: Smite for undead, Bane of Arthropods for spiders, and Sharpness for a smaller, universal boost. You may also come across a Looting enchant, increasing the drop rate of rare materials such as Blaze Powder and Wither Skulls.

Tool enchants are some of the most useful in the game. Silk Touch allows you to harvest blocks that would normally be destroyed or broken down into components when demolished. Efficiency increases the speed with which you mine, chop or dig. Unbreaking can greatly extend the life of your tools, by reducing the chance that each strike will damage their durability.

ON THE BOOKS

It's also possible to store enchantments in books, to apply to an item later, trade to a friend or just for the satisfaction of carrying a bunch of enchanted books around like the boss wizard you are. You may also come across enchanted books in dungeon chests, strongholds and temples.

Librarians in NPC villages will also sell you enchanted books. That sounds more like a book store than a library, but it's hardly worth falling out with Mojang over, is it?

KNOW YOUR BIOMES



Need torches early in the game? Taking a couple from the buildings can help until you have the materials to make your own.



Check the smith's house and you'll often find a chest filled with goodies (usually rare metals) for you to steal. Or 'borrow'.

Villages usually have ready-made wheat farms ripe for harvesting. You'll be able to make bread in no time.

VILLAGE

W

They're inhabited by large-nosed villagers who happily go about their own business

with randomly created, fully-formed structures, villages are often the most exciting of the biomes to stumble into.

during the day. You can even trade with them in the PC and console versions. However, zombies will frequently invade during the night and knock down doors to infect the natives, so you'll have to fight to protect them or destroy the zombie spawn point. Not quite *Resident Evil 4*'s village scene, but it's as close as you're likely to get in *Minecraft*!

The background of the page is a Minecraft Nether scene. In the upper left, a dark, pixelated staircase made of netherrack blocks leads upwards. The lower half of the image is dominated by a large, flowing pool of bright orange and yellow lava. A path of netherrack blocks winds through the lava, with several small fires burning on the path. The overall lighting is dim, with the primary light source being the lava.

HELP

GET ME OUT

HELP! OF THIS MESS!

Don't panic, we were all beginners once. We've all been stuck in holes we can't get out of, or we've dunked ourselves into lava with no obvious way to survive the ordeal. These things happen. In fact, these things are part and parcel of being a *Minecraft* player. Relax, and it'll all be okay. Probably?

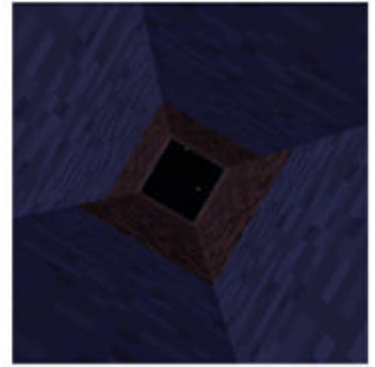
Only kidding. Of course it won't be! You need help, FAST. Luckily, you've come to the right place.

We weren't lying when we said we've been there before—we still wake up in a cold sweat remembering the time we were surrounded by creepers, for instance. But we've learned from our mistakes, and we're now equipped with the knowledge to help you out of *Minecraft*'s stickiest situations. So if you're in dire straits, just read on for aid.



HELP! I've run out of torches, what now?

Prevention is the best protection. Torches are one of the most important items you'll need for exploring to keep mobs at bay so it's vital to make as many as you can before going anywhere. At the very least, carry wood blocks with you. Then you can craft sticks. Then? Mine for coal to hastily construct some torches without the need for much inventory space. Can't find the materials? Villages spawn with torches, so steal 'em.



HELP! I got lost outside in the dark and can't find my way home. How do I survive?

Don't worry, all you need to do is build a quick emergency shelter to keep you safe until morning. Simply dig 3 blocks down and jump in, then place a block above your head so nothing else can fall in with you. Then just wait it out until sunrise. Boring, but effective.

HELP! I need to get up high!

If you've no ladders to hand and simply want to get up high or out of a cave then there's always 'nerd poling'. This involves jumping in the air and placing a dirt block directly below you. Keep doing this to build a precarious tower all the way

to the top. Be sure to come back and get rid of it once you're done, as it looks awful. A word of warning, though: if you're playing in a larger multiplayer server check the rules, as some ask you to avoid creating such eyesores.



HELP! I'm trapped in the Nether!



How did that happen? Let us guess, a Ghast blew up your Nether Portal? Well, hopefully you've prepared well before heading into the Nether in the first place. Before even setting foot into this hellish world you should ensure you have the necessary supplies should the worst happen. Bring a few blocks of Obsidian (10 minimum, but 14 to be comfortable) along with a flint and steel for reigniting the portal should it go out. Considering how dangerous the Nether is you might consider heavier armor, but we'd recommend limiting yourself to leather or iron gear at the most. That way, if you do get trapped and die, you won't lose too much. To prevent getting trapped in the first place, though, bring some cobblestone with you and surround your portal Nether-side as soon as you arrive.

If your Nether portal goes out and you don't have a flint and steel to hand then all is not lost! Those pesky Ghasts (that are probably responsible) may just be your ticket out of here. If you can coax a fireball from one of them into your obsidian gate (hopefully it's still in one piece) then you may be able to reignite the portal and escape with your life.

If that just sounds too dangerous, or there are no Ghasts nearby, then there are still a couple more risky techniques to try. If you have some wood in your inventory then lay down a trail of blocks from the obsidian gate to the nearest lava source. Alternatively build a lava puddle in front of your gate and place some wood inside the frame to catch fire. Having a bucket helps, but if the worst comes to pass you could always try to build a stream of lava from nearby, if there is any.

In short: find fire. Failing that, make peace with your losses.

HELP! I've only got one heart left!

Uh-oh, that's quite the pinch you're in! You can refill your health with potions if you're able to craft them, but if not then be sure to eat something and make sure your hunger bar is full. Your health will start to restore

itself naturally if your belly is filled. Be on the look for mobs while this is happening. Munch some grub then duck into an emergency shelter-hole until you're at full strength again. No food sources at all? Best of luck! Can we have your stuff?

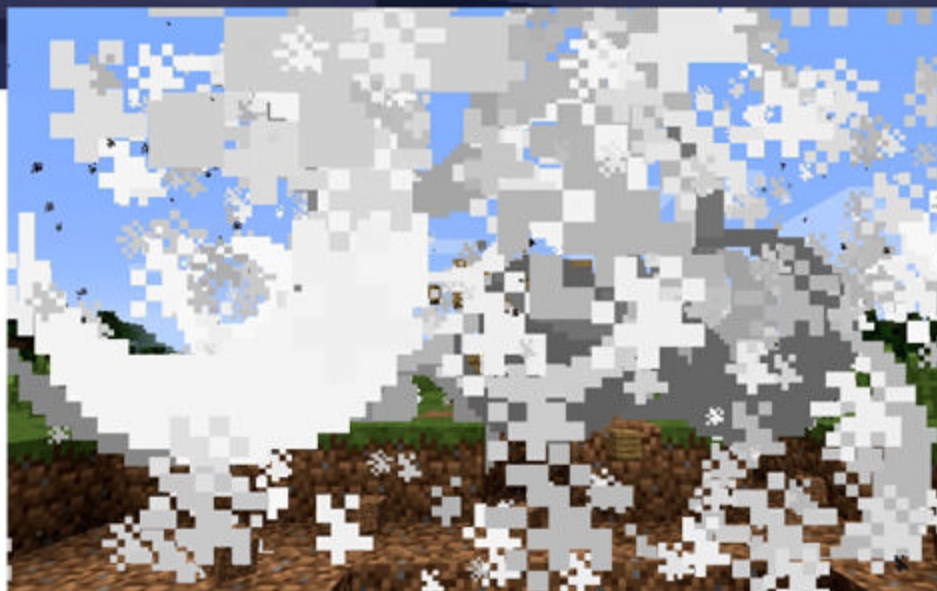


HELP! A creeper blew up my house! Stop them!

There are several different ways to deter creepers from getting close enough to your home to do any damage: taming ocelots and getting them to sit outside your house to scare creepers away is our favorite.

Other quick fire tips: always dash from your door so that creepers don't get a chance to detonate nearby; create a fence and torch perimeter to make it harder for them to approach; add moats to your

borders to dampen the creepers' explosive flesh; use a bow and arrow to kill them before they can get close (duh!); build your house out of obsidian, which is impervious to their attacks; and finally, build a basement with 'murder holes' one-block high at foot level. The creepers can't see you in these, so you can attack them without getting hurt. It's cheap, sure, but when it's your house that's at stake, you do what you have to.



ensnare your foe, consider placing lines of underground TNT splaying out around your decoy house like spokes on a bike wheel. That way, even if the player tries to set off the trap and run away they'll be chased by a mega-explosion chain reaction. Toasty.

When it comes to protecting your own house, consider building a couple of decoy properties with bespoke traps. A stone-walled house with an iron door might seem easy pickings; a simple redstone lock isn't enough to keep people out. Place a block of sand directly above the door and some lava above this. When your wannabe burglar comes in they may try to destroy the door, and that lava will rain down. Hot justice.

HELP! I'm the victim of a PvP griever!

Ask yourself what you want from *Minecraft*. Do you want to build unhindered by, or perhaps in co-operation with, others? If so it's worth picking your online server very carefully. Be sure that you're aware of the rules before you commit too much time. If however you want to get sweet revenge on your griever, well then perhaps it's time to learn the skills necessary to get your own back. Just promise you'll do impressions of Schwarzenegger in Predator while deploying them, alright?

(Just a note, we're talking about fair-play vanilla *Minecraft* PvP tactics, not the naughty game-breaking stuff that

unsavory types get up to.)

First off, here's a simple TNT trap. Slap a pressure plate atop a block, itself above a TNT block and, hey presto, you've got an explosive landmine, primed to go off when someone steps on it. These are best deployed in your opponents' home base, typically near the door so that they accidentally trigger it on entry.

The trick to getting these traps to work is to hide those pressure plates. There are many complex ways to do this. Some favorites include baiting your foe with chests or decoy houses, or by placing fake mines to invoke a false sense of security in your foe.

If you're relying on a TNT trap to





HELP! I've fallen in lava and it hurts!

Of course, your first reaction will likely be rage, disappointment or outright panic, but there are some important steps to take should you tumble into the fiery drink. First of all, get the hell out! Death might be inevitable, but your entire inventory will spray out of your corpse and if that ends up in the lava too then say goodbye to your best stuff. For the best shot at getting it back, tap F3 and then F2 quickly to take a screenshot of your co-ordinates. That way, when you respawn it'll be easier to find your gear again.

HELP!

I heard an Enderman!

Don't look straight at it! It's fine to get a bead on an Enderman in your peripheral vision but if you look directly at it with your crosshairs then it becomes provoked and will actively attack you. These lanky mobs have an unnerving ability to teleport behind you, so if you do end up facing off, back into a corner and get ready for a fight. Slip a pumpkin on your bonce and it'll cover up your crosshair, enabling you to look at them to your heart's content. Do this when in The End, which is brimming with the blighters.

If you find yourself throwing down against an Enderman or two then know that they will chase you until either they are dead or they get distracted. They don't like water, rain or sunlight, so use these things to your advantage. Also worth noting is that they, weirdly, cannot see through transparent blocks such as glass or glass panes. If you see one knocking about outside your house it's probably worth gearing up and taking it down, however, as they will try and steal certain blocks and items. They are also, needless to say, terrifying.



HELP! I died and lost absolutely everything!

It happens to everyone at some point or another. You're deep underground happily mining away and gathering up a tasty pile of diamonds, possibly kitted out with a high end armor set and top grade tools to boot. Out of nowhere comes a light hissing and a sudden progress-halting explosion. One respawn later and you're squeezing the rage out of your eyes between finger and thumb and staring at a barren inventory screen. You've lost everything. But have you? Think about the hardened *Minecrafters* battling it out across one-

death Ironman hardcore mode. It's not all that bad. Even by losing everything you'll have gained something: knowledge. For a start you now know not to carry your best gear with you at all times. To safeguard against similar events in the future, consider building yourself a series of underground outposts. You might want to consider a mine cart or Enderchest system to transport/teleport your gathered gear up to the surface. Be careful, and be sure to transfer your items to more secure chests regularly; Enderchests are notoriously weak.



HELP! My house is on fire!

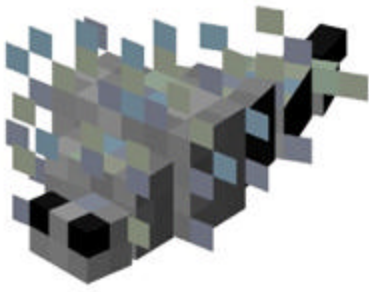
Built a lava pool too close to home have we? Don't worry! You can extinguish it by using water in buckets or by dropping sand or gravel on top of it. You'll have to rebuild, but next time make sure your surround fire sources with a non-flammable cobblestone perimeter of two blocks to every side.

HELP!

I slipped and fell into a ravine! How do I get myself out?

If you don't look where you're going it can be quite easy to miss these usually narrow crevices and plummet deep within. If you survive the fall then you'll have a tough time getting out again as the walls are usually sheer. There are two ways to get out. First: if you've got enough dirt blocks with you then simply jump up and place one beneath your feet and repeat the process until you've built a tower tall enough to reach the surface.

Second: you'll have to mine your way out. Using the cliffside as a reference, work at cutting in a staircase along its edge, steadily getting higher until you make it topside. Though this will take much longer it also leaves you with a handy way to get in and out again for future exploration.



HELP! I'm being assaulted by silverfish!

Right, so technically, you've only got yourself to blame, as silverfish don't spawn naturally and will only show up when you mindlessly mine through stone in a Stronghold biome. To spawn these swarming slitherers, you'll have accidentally broken a Monster Egg block. But to be fair these look almost identical to regular old stone or cobblestone. The best way to tell if you're about to mine a Monster Egg by mistake is to mentally gauge how long it's taking to break a given block. Monster Eggs take slightly longer to mine than standard stone or cobblestone.

Once you've spawned one of them be very careful. Attacking them directly, and not killing them with a single attack, will alert other silverfish in the area and you could end up in real trouble. A single silverfish can be killed in a single hit with a diamond sword.

But what if you've already signalled your presence to a small silverfish army? Well, one tactic is to build a quick two-block-high pillar and stand atop that. The silverfish won't be able to reach you. If you have a bucket of lava, this can be a great way to indirectly damage them; taking them out without alerting even more of the blighters. Make a note of where you place the lava so that you can re-bucket it again safely.

Whatever you do, don't try to poison a silverfish with a splash potion. The ticking damage takes an age to kill them and this kind of attack is considered direct damage, so it will cause nearby silverfish to spawn.



HELP! I'm being accosted by creepers!

If you've got somewhere to run, do just that, as the key to fighting creepers is to give yourself enough space if they explode. If you manage to get out of reach they will stop, even in mid-explode animation, to chase after you again. Unable to run or stuck in a corner

without the means to kill them quickly or knock them back with a bow and arrow? It may very well be the end. Sorry. Remember to hit F3 and then F2 to quickly take a screenshot of your co-ordinates so you can gather up your gear again post-death.

HELP! I'm lost underground and don't know how to get out!



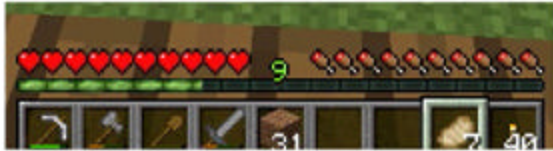
Don't worry. With so many randomly generated warrens for you to stumble across underground it's easy to get a bit too keen with the exploring and find yourself further away from home than you expected. Like with most *Minecraft* problems, it's always best to go in prepared: always carry wood, food and torches.

As you're descending for the first time be sure to place torches down **ONLY** on your right side as you move. That way you always know where you've come from and can easily follow them back up and out again—you'll only have to look out for the torches on your left.

Unfortunately you don't always have the benefit of hindsight, so the only other way out is to mine your way steadily upwards. This is where wood comes in handy. It'll give you the planks you need to make a crafting table and the sticks you need to keep a steady supply of pickaxes and torches flowing. Pick a wall and work at building a 2x2 staircase upwards until you reach the surface. It'll be slow going, but you will get there and you can do this even if you don't have any tools or torches left, it'll just be much darker and slower.

You can also use the more risky method of mining directly upwards then jumping and filling the block beneath you with whatever material you've just dug up. While it's faster you may end up finding sand or gravel, which will immediately fall on top of you and crush you to death.

HELP! I'm dying of hunger! What do I do?



You need to get some food in your belly, quick. Your health won't regenerate until your hunger bar is full again. Certain foods will regenerate more health than others: for instance, a raw pork chop will fill two hunger points while a cooked one (made by placing raw meat in a furnace) will fill four. With animals being quite easy to find, cooking their meat is the most efficient way to go. Just remember to kill them before

attempting to cook!

More complicated items such as cake can be used multiple times to fend off hunger, but the process isn't always worth the pay off.

Don't have any food on you? Hack at the foliage on trees and an apple might drop, ready for you to gobble up. Can't find those? Then rotten flesh from zombies or spider eyes will get the job done, but will run the risk of poisoning you.

HELP!

Spiders keep appearing on the top of my house!

A common problem but with an easy fix. Spiders can climb up flat surfaces and will attempt to reach you by climbing on your roof and making that horrible screeching noise all night. To stop them getting up there you'll need to build a more elaborate roof. Build your shelter as normal, but give your house-topper a one-block 'lip' around the edge and taper it up to a point. The spiders won't be able to get over the lip on the building and harass you anymore. Easy.





HELP!

I've eaten a pufferfish!

Real life Japanese sushi chefs need to obtain a licence before they can serve up these potentially deadly delicacies, so what made you think munching down on one you just yanked out of the water was a good idea? You'll now have three debuffs, which will leave you gasping with half a heart left within a minute. Wait it out in a safe location, potion-up if you have any to hand and next time use your fresh catch to tame an ocelot or brew a potion of water breathing. Pufferfish: not for eating!

HELP! I'm lost overground!

Remember: you're trying to survive. Don't bother walking in uncertain directions during the night. Instead, trust in the daylight hours and hunker down each sunset. It's a good idea to have a map on you at all times and to refer to it regularly, if only to reveal more of the land around you. Using a map and eight sheets of paper you can craft a bigger map with more of the land included: perfect for exploring beyond the borders. Also, try building colored wool or clay pillars to act as reference points.



HELP! Monsters keep spawning in my bed!

So you've finally tucked yourself in for the night after a hard day's mining, ready to drift off and have sweet blocky dreams. Unfortunately, monsters sometimes have other ideas and will wake you by repeatedly slamming their square fists into your sleepy face. Once they've spawned there's not much you can do aside from desperately swing at them until they vaporize, but there are ways to prevent it from happening in the first place. Monsters spawn in dark places such as in

caves or at night, so if they're doing it inside your house then it's far too dark to be considered safe and you'll have to start installing some light fixtures. Torches are your friends—make sure you place them in every corner inside, and if you have a particularly large room then be sure to build pillars in the center to place your torches. That way the light completely fills the room. Don't forget to place them outside, too. Does the interior designer in you not like torches? Try making ceiling light out of radiant glowstone.




SWAMPLAND

Y

ou can tell swamplands not just by the darker tone of grass and obvious watery-ness, but also by the abundance of lily pads and vines growing all over the place. Ideal for finding sugarcanes, smaller clay

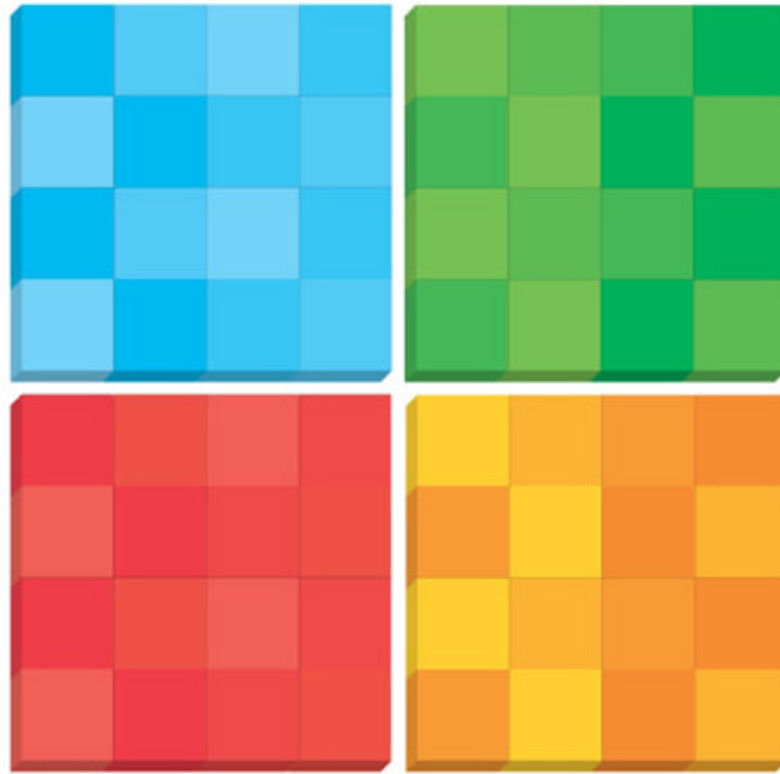
deposits and mushrooms, this sea-level biome also has a chance to spawn a witch's hut: perfect for getting your hands on witch loot, including the occasional potion. Watch out for slimes, though. They spawn like crazy at night, which can make a midnight stroll an experience you won't soon forget. If you survive, of course. You very well might not.

If you're setting up a farm it might be worth gathering a few lily pads first. They're great for crossing water surfaces quickly without having to build full bridges.



Full moon in the sky? Beware: slimes are even more likely to spawn and make your life a misery.

Slimes aren't all bad. Sure they can see through blocks and split in two on death, but grab some slimeballs from them and you can craft leads, magma creams and sticky pistons. What's not to like?



BUILDING A BIGGER FUTURE

Why Microsoft has spent \$2.5 billion on
Minecraft, and what it means for fans



he morning of 15 September, was not like any other. Well, it might've been for most people—

showers, shaves, repeated self-affirmations to stave off the demons inside—but not for Markus Persson. For that day the Swedish programmer, known to the world as 'Notch', was planning to tell the world that he'd had enough.

He'd had enough of being a celebrity. He'd had enough of getting abusive emails from people he didn't even know. And he'd had enough of the pressure of being presented as a 'symbol', and of being responsible for something huge that he didn't understand, didn't want to work on and kept being pestered about. Enough was enough. He was going to announce that he was selling the company he'd built from scratch.

A few months earlier, Notch had expressed his frustration on Twitter. "Anyone want to buy my share of Mojang so I can move on with my life?" he wrote. "Getting hate for trying to do the right thing is not my gig." He was responding to community furore over Mojang's decision to begin enforcing parts of the end-user license agreement (EULA) that every *Minecraft* player agrees to before they play.

The EULA controversy

In that agreement, Mojang expressly forbids people from charging others for non-cosmetic items on multiplayer servers. For some time, a blind eye had been turned to servers where people could 'pay to win'—exchanging real money for virtual diamond swords. But when emails started rolling in from parents asking Mojang to refund money their children had given to anonymous server owners, the company knew it had to put its foot down and make a change.

The response to this crackdown was immediate and vitriolic. Server owners wrote open letters condemning the move. A Twitter hashtag, #saveMinecraft, was seen by over 500,000 users. The community quickly became split between supporting the creators of the game they loved, and the people that ran the servers they played on. Wars raged across *Minecraft* forums

and discussion boards.

It was a grim time in the Mojang offices. One of the biggest surprises for a company that had always been adored by its fans was the extent to which its staff, and particularly Notch, were flooded with abusive messages. Despite multiple attempts to reach out to the community, listen to their concerns and clarify misconceptions, the hate kept pouring in from *Minecraft* players. This, for Notch, was final confirmation of something he'd suspected for a long time—*Minecraft* simply didn't belong to him any more.

So, tired of dealing with it, he tweeted an offer to sell his share of the company. Most saw it as an expression of exasperation, not to be taken seriously. But behind the scenes, he also reached out to Microsoft. The software giant had made advances towards Mojang in the past, and Notch had long had a positive working relationship with the company. He asked his contacts there if the company might still be interested in acquiring Mojang.

The offer

Microsoft was definitely interested. It had cash, a new CEO, a profitable gaming wing, and plenty of customers that either loved *Minecraft* themselves or saw the joy it brought to their kids.

The company's offer to Notch and the other Mojang shareholders was \$2.5 billion dollars—an incomprehensibly vast figure to many *Minecraft* players. It was a relatively small amount, however, compared to other companies Microsoft had recently acquired—about a third, for example, of what it paid for Nokia in April.

In many ways, the price was an absolute steal. For the \$2.5 billion, Microsoft would get the third best-selling videogame of all time, a meticulously assembled group of about 40 staff totally dedicated to making the best games possible, and one of the most active and passionate communities in the games industry. The statistics that Microsoft rolled out to justify the decision are almost as eye-boggling as the price. It's the most popular online game on Xbox, with more than two billion hours played on Xbox 360 alone in the past two years. It's one of the highest-

THE MICROSOFT BUYOUT

grossing mobile games of all time, sitting permanently at the top of the iOS and Android paid apps charts. And its fans are loyal—almost 90 per cent of people that have bought *Minecraft* have played it at least once over the last year. The acquisition, Microsoft said, would pay for itself in less than five years.

For weeks, discussions between the two parties were kept top secret, with staff of both companies unaware of what was happening. But a week before the announcement was to be made public, the word began to spread inside both companies. Almost immediately, the news leaked to the Wall Street Journal, attributed to a ‘person with knowledge of the matter’. The rumor was soon all over the mainstream and gaming press.

The initial response was disbelief. Notch had long been seen as a figurehead for the indie games movement, as well as its most successful export to the wider world. The idea that he might sell out to the big guys was treated with immediate skepticism. People pointed to his fondness for open platforms, to his history of taking anti-establishment positions on issues such as virtual reality—he ended development of *Minecraft* on the Oculus Rift after the acquisition of Oculus VR by Facebook—and to past comments that he’d already turned down offers of a similar size.

The fact the buyer was named as Microsoft also detracted from the credibility of the rumor. Notch had

attacked Microsoft’s decisions in the gaming industry in the past and refused to certify a version of the game for Windows 8, saying the company was “ruining the PC as an open platform”. Meanwhile, a version of the game for PlayStation 4—the biggest rival to Xbox One—had launched just a week previously.

But those looking closely would have spotted some clues suggesting that the deal was real. Notch’s past attacks on Microsoft were matched with as much praise, and had never actually affected the two companies’ good business relationship.

“The community became split. Wars raged across *Minecraft* forums and discussion boards”

Meanwhile, the Mojang founder had stated very publicly that he was not only willing to sell, but desperate to be rid of his unwanted fame in the wake of the EULA fiasco.

The one thing there was near-unanimous agreement on is that if the rumors were true, it would not be a good thing for players. PC Gamer’s Evan Lahti called Microsoft “PC gaming’s most obstructive opponent”, pointing to its fondness for exclusivity deals, horrific digital rights-management software, and for destroying all of its past games studio acquisitions in a variety of cruel and unusual ways. And he was far from alone, with numerous players, journalists and commentators all jumping on the bandwagon of negativity.

Judgement day

But the rumors were true. After Notch arrived at work on that September morn, he gave the nod for Mojang staffer (and former PC Gamer web editor) Owen Hill to press ‘publish’ on a blog post confirming the sale. “Yes, the deal is real,” Hill wrote. “Mojang is being bought by Microsoft.”

He described how much of the reaction to the rumor had mirrored that of the company’s staff in Sweden when they were told the news. “Change is scary, and this is a big change for all of us,” he said. But Hill sought to reassure fans: “It’s going to

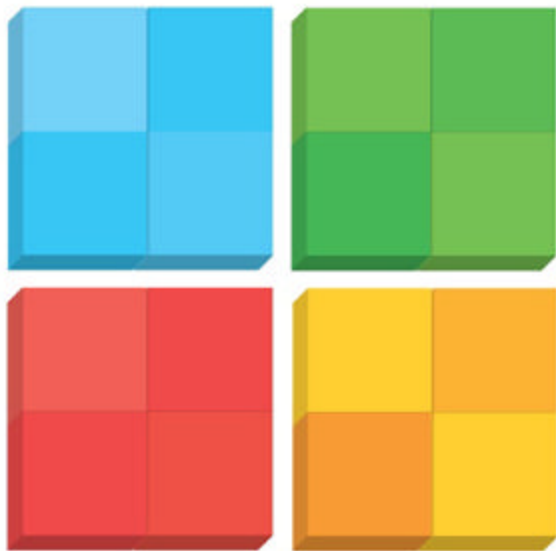
be good though. Everything is going to be OK. The future of *Minecraft* and you—the community—are extremely important to everyone involved.”

He outlined the reasons for the sale—that Notch didn’t want the responsibility of owning such a massive company, that the pressure had become too much to handle, and that there were only a handful of companies in the world that could grow *Minecraft* on the scale that it deserves. Of those companies, Hill said, Mojang had been impressed by how dedicated Microsoft had been to the development of Xbox versions of the game.

Most notably, he admitted where there were also unanswered questions. He said there was no reason for development of versions of *Minecraft* for non-Microsoft platforms to stop, but pointed out that, for example, Microsoft wouldn’t be able to force Sony to keep working on the PS4 version. He also added that Mojang didn’t know Microsoft’s specific plans for *Minecraft*’s future, but promised that everyone involved wanted the community to grow. He said that “stopping players making cool stuff” wasn’t in anyone’s interests. Finally, he mentioned that Mojang’s founders—Notch, along with CEO Carl Manneh and Scrolls creator Jakob Porser—would be leaving the company. “We don’t know what they’re planning,” he said. “It won’t be *Minecraft*-related, but it will probably be cool.”

Microsoft, in its rather-more-corporate announcement, also went to great lengths to reassure fans that nothing would be changing in the short term. “We are going to maintain *Minecraft* and its community in all the ways people love today, with a commitment to nurture and grow it long into the future,” promised Phil Spencer, head of the Xbox division at Microsoft. The company called the *Minecraft* franchise “iconic”, and said that fans would benefit from Microsoft’s investments in mobile and cloud technologies—particularly when it comes to “richer and faster worlds, more powerful development tools and more opportunities to connect across the *Minecraft* community.”

Later that afternoon, Notch shared his side of the story. In a





Hopefully scenes like this will soon be on Windows Phones, too.



MOVING ON A NOTCH

Where to now following the windfall?



One of the biggest questions surrounding the Mojang acquisition is what *Minecraft*'s beloved founder will do next. There's a tremendous amount of pressure on the Swedish programmer

to follow up his hit.

So far, that pressure has ended many of the projects that he's worked on. His sandbox space exploration game *Ox10c* was shelved after he hit creative roadblocks, and the only other thing he's released is a tongue-in-cheek game called *Cliffhanger*—where you play as a horse running around some cliffs.

In his emotional blog post announcing the sale, Notch wrote that he was intending to "go back to doing Ludum Dares and small web experiments". He added: "If I ever accidentally make something that seems to gain traction, I'll probably abandon it immediately." As such, don't expect him to launch any major new projects any time soon.

The real answer can probably be found in a post he wrote on Reddit at the height of the EULA incident about what he'd do if he left Mojang. "I'd go sit on a beach somewhere with a laptop, firmly locked into my own little world, just poking at code." He wrote. "Just like in the good old days. Except on a beach."

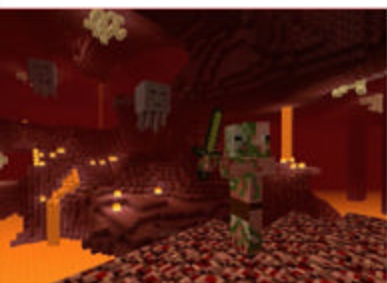
There are no guarantees that he'll build another *Minecraft*, but perhaps he doesn't need to.



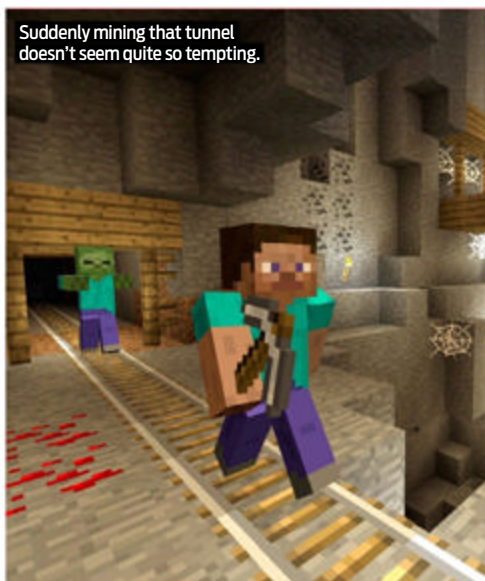
Sometimes you can only Marvel at the creativity on display.



Microsoft will be seeing a whole lot of green in its blocky future.



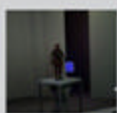
Suddenly mining that tunnel doesn't seem quite so tempting.



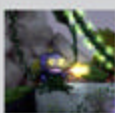
You can always cheer yourself up with some milky mushrooms. Mmm.

BUT WHAT ABOUT... The future of Mojang's other titles?

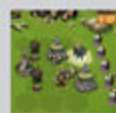
Minecraft isn't the only game under development at Mojang. The company has a few other titles (*Scrolls*, *Cobalt* and *Ox10c*) which it has worked on over recent years.



Ox10c is another of Notch's creations, a sandbox space game with programmable computers set in the distant future. However, development ended in mid-2013 when Notch lost interest, and it's currently shelved. Following the acquisition and Notch's departure from the company, it'll likely remain so.



Cobalt is an action platformer being developed by Oxeye Game Studio in Mojang's offices. Mojang is publishing the game, a deal that will remain in place once Microsoft is in charge. Microsoft could end the contract early, but with Cobalt approaching open beta it's likely the game will be given a chance.



Finally, **Scrolls** is the brainchild of Mojang co-founder Jakob Porser, who'll be leaving the company at the same time as Notch. That might make its future questionable, but the game has been in beta for some time, and is now very close to a full release. As such, it's almost certainly sticking around.

highly personal blog post, he wrote that during the EULA shambles he had realized that he didn't have the connection to his fans he thought he had. "I was confused. I didn't understand," he said. "I make games because it's fun, and because I love games and I love to program, but I don't make games with the intention of them becoming huge hits, and I don't try to change the world."

"As soon as this deal is finalized," he said, "I will leave Mojang and go back to doing Ludum Dares and small web experiments. If I ever accidentally make something that seems to gain traction, I'll probably abandon it immediately. I'm aware this goes against a lot of what I've said in public. I have no good response to that. I'm also aware a lot of you were using me as a symbol of some perceived struggle. I'm not. I'm a person, and I'm right there struggling with you."

He concluded the post by thanking the community for turning *Minecraft* into what it has become. "It's not about the money," he said. "It's about my sanity."

What happens now?

In the days following the announcement, the business community was quick to loudly applaud Microsoft's acquisition—pointing out how much money the company could make from the deal. Ben Thompson, a technology strategist, wrote on his blog that it "isn't just a great financial decision; it's a good strategic one as well that fits very nicely with Microsoft's new vision". Reuters' Bill Rigby added that it could help pull people into using Windows Phone, and said that the price was "small change" for Microsoft. Only Shira Ovide and Evelyn Rusli, writing in the *Wall Street Journal*, noted fan fears over the deal, writing that "without Mojang's original backers, it could prove difficult for Microsoft to sustain the videogame and nurture its community".

Among that community, however, the reassurance strategy seemed to work. The reaction to the confirmation of the rumor was more muted than the rumor itself, with most vowing to reserve judgement. More than anything, players responded to the announcement with an outpouring of memories of

their favorite times in *Minecraft*, and their most beloved creations. Anger, by this point, had already cooled into sentimentality.

Both companies have said that fans shouldn't expect any major short-term changes to the game. Most of the Mojang staff—Notch and his co-founders aside—will be staying with the company for the time being, and continue to work at its offices in Stockholm. As such, it should be business as usual—the normal cycle of regular development builds and less-regular patches should continue unaffected.

"I make games because it's fun and I love games. It's not about the money. It's about my sanity"

Longer-term, it's harder to predict what might happen. Microsoft will likely find the resources to finally put together a Windows Phone version, given how popular *Minecraft* Pocket Edition has been on other mobile platforms. The Xbox 360 and Xbox One editions of the game will no doubt also benefit from a bit of extra attention—and the community as a whole stands to benefit from them being brought up to the standard of the PC version.

The desktop edition will likely retain its status as the place where new features arrive first. Microsoft's considerable resources could even help the pace of development increase, and if the company is smart then those resources will be funnelled into the long-promised official mod support. Rolling that out as soon as possible is by far the best chance Microsoft has of keeping *Minecraft* relevant for years into the future. It's also probable that *Minecraft* Realms, Mojang's official multiplayer servers, will be shifted from their current home on Amazon's web services to Microsoft's Azure platform.

Pocket Edition players on iOS and Android shouldn't expect to be cut off from updates. Neither Apple nor Google have played a large part in the development of Pocket Edition to date on their respective platforms, and Microsoft's new CEO—Satya Nadella—is rather friendlier to

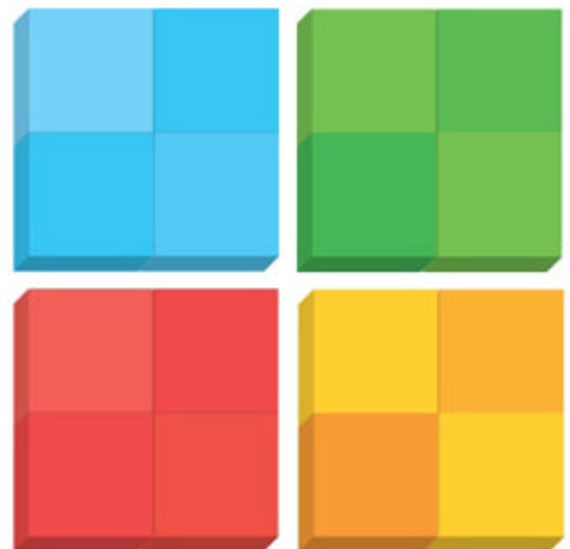
cross-platform software than his predecessor. He released versions of Microsoft Office for iOS and Android with great fanfare just days into his new job—something his predecessors had always resisted.

Server owners will probably be fine. Despite the fact that Microsoft's lawyers are likely to be far hungrier than Mojang's, the battle over the EULA has quietened and it's rather unlikely that Microsoft will want to reawaken that monster among an already-suspicious community. For now, the rules will probably stay as they are—where you can charge for access to your server, or for cosmetic items, but not for anything that affects the game itself.

What's mine is yours

One thing is for sure: *Minecraft*'s community will remain as vibrant as ever. Its players will continue to create incredible builds and exciting mods. The vast creativity of its players has long been a hallmark of *Minecraft*, and has kept the game growing like crazy as other names rose and fell.

Notch knows this, and ultimately that's probably why he finally feels comfortable handing over the reins of his creation to someone else. He knows that whatever Microsoft does, *Minecraft* can't be killed. "In one sense, it belongs to Microsoft now," he wrote in his blog post. "In a much bigger sense, it's belonged to all of you for a long time, and that will never change." ■



WHAT IT'S WORTH

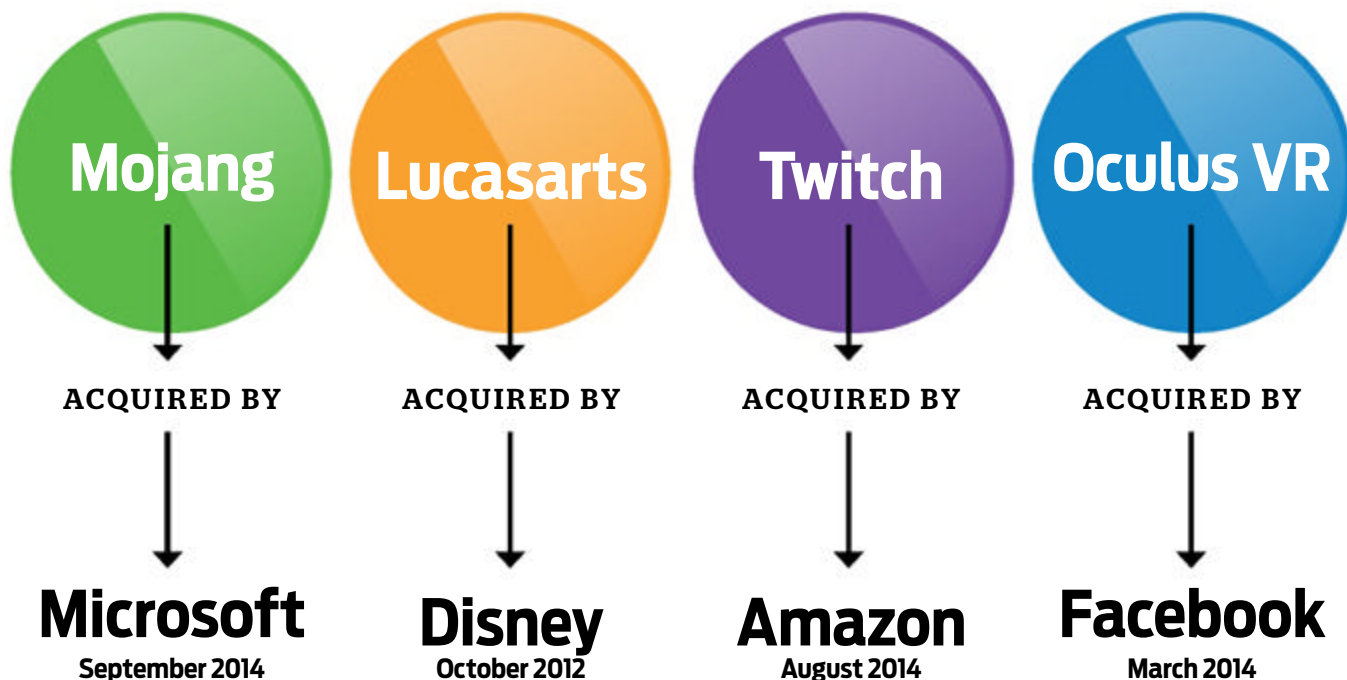
THE MICROSOFT-MOJANG BUYOUT



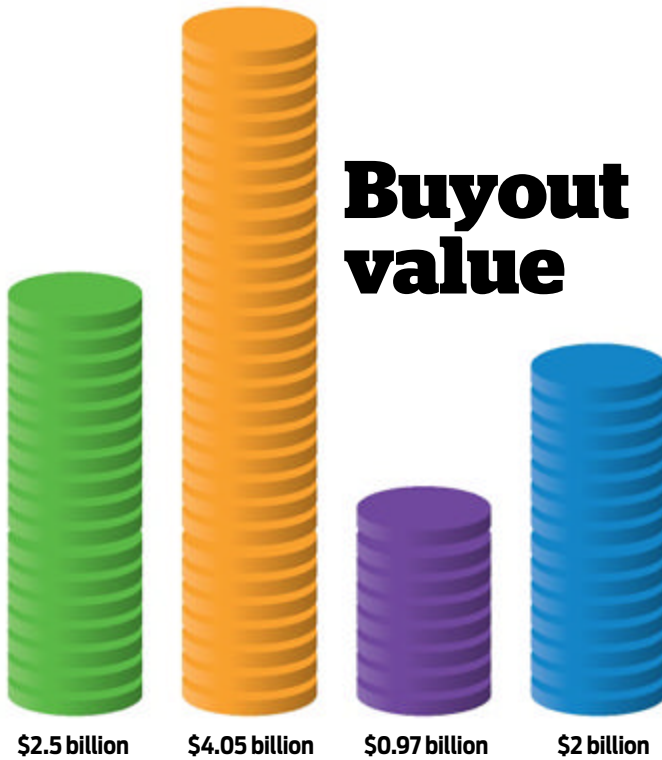
Can you put a price on a phenomenon? If the sale of Mojang is anything to go by, the answer is

a resounding yes. But is this a smart move by Microsoft? That's a more difficult question to answer, not least because the numbers associated with *Minecraft* are so staggeringly huge: 50 million users, 10 million Facebook likes, 15,000 copies installed every day. But with other companies doing a lot of big spending lately, how does this deal compare? Here's a look at how the little team that could can stand up to the biggest suits out there...

MICROSOFT has bought up the biggest *Minecraft* cake in existence, but how does the deal stack up to the competition?



Buyout value



Company age in years

Sales of most popular product



Estimated revenues



Is the Microsoft deal good for fans?

YES!

Ultimately it's the players that are getting the best out of this deal, argues a hopeful **DANIELLA LUCAS**

While it's sad that Notch is no longer the chief of diamond pickaxes, it was bound to happen at some point. He had said before that he wanted to focus on other things, but the work of *Minecraft* kept pulling him back, brick by brick. Now he's free to unleash his genius on entirely new projects.

Change is a difficult thing, especially at the top, but there's no need to worry. *Minecraft* is in safer, much larger hands. With the extra resources that Microsoft brings to the table, Mojang will have far more support when it comes to things like getting updates through quickly and everyday management issues.

With such a vocal and important community, the new owner will know better than to mess with the creative formula that makes *Minecraft* so compelling. The way the news was handled so delicately – emphasizing how important we are to them – is proof of that. Ok, so there might be timed exclusivity deals that see Xbox One, 360 and PC owners getting some new features before their Sony brethren, and perhaps the occasional extra skin packs, but it knows better than to deny people those things completely. What's a little wait between versions? And while there is a risk that Sony might not want to have the big M's name on something it's selling, *Minecraft* is simply too big a deal to discard.

It's more than just a game: it's

become a revolutionary toy for a modern, digital age. It's shaped the way we look at playtime and how powerful a force imagination can be in a videogame. It's not going anywhere. While Microsoft may have been the ones that dug deep for the cash, it's ultimately us, the players, that

own *Minecraft* – Notch said as much in his press release. We build the structures; Mojang merely supplies the blocks. It's the fans and all of our creations that make *Minecraft* a success. All Microsoft is doing is giving Mojang the resources to make that go even further that it already has. ■





Off the back of this deal *Minecraft* can never become 'the new Lego'. Until now

Mojang's masterpiece had become synonymous with players coming together to be creative, just as previous generations have done over the Danish construction toy. Lego, however, doesn't require you to

declare any form of loyalty. You don't have to relinquish another avenue of fun to enjoy tipping a bucket of the bricks on the floor. With expensive consoles and platform exclusivity, that's not the case.

When *Minecraft* 2 (or whatever Microsoft chooses to call it) arrives, it will surely be an Xbox/PC exclusive. It will become synonymous with Xbox and become yet another fan-rage flaming battleground. Imagine if someone told you you could only play with Lego if you bought a certain carpet first? You'd explode.

You don't think Microsoft will go down the exclusivity route? Cast your minds back. In 2002 a little company called Rare, which had been pumping out convention-breaking classics on Nintendo machines for seven years, was wholly bought out by the big M. From the likes of *Goldeneye 007*, *Perfect Dark* and *Banjo Kazooie*, Rare was reduced to making passable Kinect titles. From the outside looking in, the British outfit looks like a developer

bereft of its founders, lifeless as its overlord points it in risk-averse, easily marketable directions.

Just think what Mojang could have gone on to do without the buyout. For all the money it's made it's still a small company. Its studio houses a mere 40 staff. If the games industry were a warfront, Mojang would be one of those zippy motorbikes Steve McQueen used in the *Great Escape*: fast moving, able to turn quickly and get to places others can't. Microsoft is a huge corporation. On the battlefield it's a tank, crushing everything with financial might. If Mojang is to exist as a part of such a vehicle, don't expect the people who work there to retain the same level of creative freedom.

Microsoft didn't spend \$2.5 billion for those 40 people to knock ideas like *Scrolls* about between *Minecraft* updates. It'll be a case of go big or go home. And, if *Minecraft* proved anything, it was that going big isn't necessarily the way you change the world. Small ideas can go a long way too. ■

NO!

The fans can only lose out in the cataclysmic wake of all that cash, contends a disappointed **MATT GILMAN**

History is doomed to repeat itself. Just look at what happened to Rare.



What the press releases really tell us about the Mojang sale

BETWEEN

Selling the company you built can't be easy, but justifying it to your fervent fans must be harder still. Mojang puts a **refreshingly humane spin** on buyouts and business deals.

MOJANG'S ANNOUNCEMENT

No time is wasted. The press release gets the bad news out of the way immediately. It's refreshingly honest and direct.

Yes, the deal is real. Mojang is being bought by Microsoft.

There's empathy and camaraderie here. Notice the 'we', too: it feels inclusive.

It was reassuring to see how many of your opinions mirrored those of the Mojangstas when we heard the news.

Few other games have the same kind of community as *Minecraft*, and this hammers home just how important that community still is.

Please remember that the future of *Minecraft* and you – the community – are extremely important to everyone involved. If you take one thing away from this post, let it be that.

Obviously, the press release can't go into all the specifics, but it tells us everything it can without getting bogged down in business speak.

We can only share so much information right now, but we've decided that being as honest as possible is the best approach. We're still working a lot of this stuff out. Mega-deals are serious business.

This is a tough thing to write, and it gently hints that Notch himself characteristically has more to say. It's an uncomfortable stance to admit, but this frankness frames the rest of the press release.

Notch has decided that he doesn't want the responsibility of owning a company of such global significance. Over the past few years he's made attempts to work on smaller projects, but the pressure of owning *Minecraft* became too much for him to handle.

Here Mojang justifies its choice and displays faith in the buyer.

We've worked closely with Microsoft since 2012, and have been impressed by their continued dedication to our game and its development.

This bit tells people what Mojang doesn't know. Instead of trying to predict what Microsoft might do, it reassures us that the flow of information will remain open. When the news comes, Mojang will tell us.

There's no reason for the development, sales, and support of the PC/Mac, Xbox 360, Xbox One, PS3, PS4, Vita, iOS, and Android versions of *Minecraft* to stop. Of course, Microsoft can't make decisions for other companies or predict the choices that they might make in the future.
AND
We don't know yet. We'll share any news as soon as we do.

After all that serious stuff, there's still time at the end for a subtle joke. It's reassuring to see that the Mojang spirit remains intact, despite the change.

How much money was the company bought for?
Microsoft acquired Mojang for a smooth 2.5 BILLION dollars.

THE LINES

As well as the official announcement, Notch wrote a **heartfelt letter** to all of his fans about why he made the decision to sell Mojang to Microsoft for \$2.5 billion.

NOTCH'S BLOG POST

Here we get a bit of a glimpse into how Notch sees *Minecraft*, and how he thinks it slipped out of his control.

I don't see myself as a real game developer. I make games because it's fun, and because I love games and I love to program, but I don't make games with the intention of them becoming huge hits, and I don't try to change the world. *Minecraft* certainly became a huge hit, and people are telling me it's changed games. I never meant for it to do either.

This section gives some context why he feels okay about letting Mojang go and explains what he's been doing lately. It's perhaps aimed at the staff as much as the community.

A relatively long time ago, I decided to step down from *Minecraft* development. Jens was the perfect person to take over leading it, and I wanted to try to do new things. At first, I failed by trying to make something big again, but since I decided to just stick to small prototypes and interesting challenges, I've had so much fun with work. I wasn't exactly sure how I fit into Mojang where people did actual work, but since people said I was important for the culture, I stayed.

This is the most important part of the blog post, and it's very confrontational. It's Notch staring the community in the face and saying 'you did this to me'. Phil Fish is a divisive figure in the games industry who was put on a pedestal by his fans and then brutally knocked from it. Notch sees himself suffering that same fate.

I was at home with a bad cold a couple of weeks ago when the internet exploded with hate against me over some kind of EULA situation that I had nothing to do with. I was confused. I didn't understand. I tweeted this in frustration. Later on, I watched the This is Phil Fish video on YouTube and started to realise I didn't have the connection to my fans I thought I had.

Here's more explanation of why he's abandoning Mojang. He never wanted to run a business, just program cool things and share his thoughts with the world.

I've become a symbol. I don't want to be a symbol, responsible for something huge that I don't understand, that I don't want to work on, that keeps coming back to me. I'm not an entrepreneur. I'm not a CEO. I'm a nerdy computer programmer who likes to have opinions on Twitter.

This part answers the obvious question of what Notch will do next.

As soon as this deal is finalised, I will leave Mojang and go back to doing Ludum Dares and small web experiments. If I ever accidentally make something that seems to gain traction, I'll probably abandon it immediately.

These paragraphs are a little sad to read. They show he's anticipating a lot of hatred for his decision, though it's worth noting that hate never materialised in any major way. Notch also admits his actions are a little out of step with his public image, again blaming the community for holding him up as something he didn't want to be.

Considering the public image of me already is a bit skewed, I don't expect to get away from negative comments by doing this, but at least now I won't feel a responsibility to read them. AND

I'm aware this goes against a lot of what I've said in public. I have no good response to that. I'm also aware a lot of you were using me as a symbol of some perceived struggle. I'm not. I'm a person, and I'm right there struggling with you.

But after that admonishment comes a big textual hug.

I love you. All of you. Thank you for turning *Minecraft* into what it has become.

This is Notch winking and saying that he doesn't think Microsoft will change much because of the mighty community.

In one sense, it belongs to Microsoft now. In a much bigger sense, it's belonged to all of you for a long time, and that will never change.

A sad but fitting end, we wish him well in his future endeavours.

It's not about the money. It's about my sanity.

ICE PLAINS

The forecast is for snow, as you might expect. Makes a change from rain, we suppose!

ou can get snow on hilltops and in colder regions in general, but you'll know a true tundra when you see it. Large, flat and near empty of wood



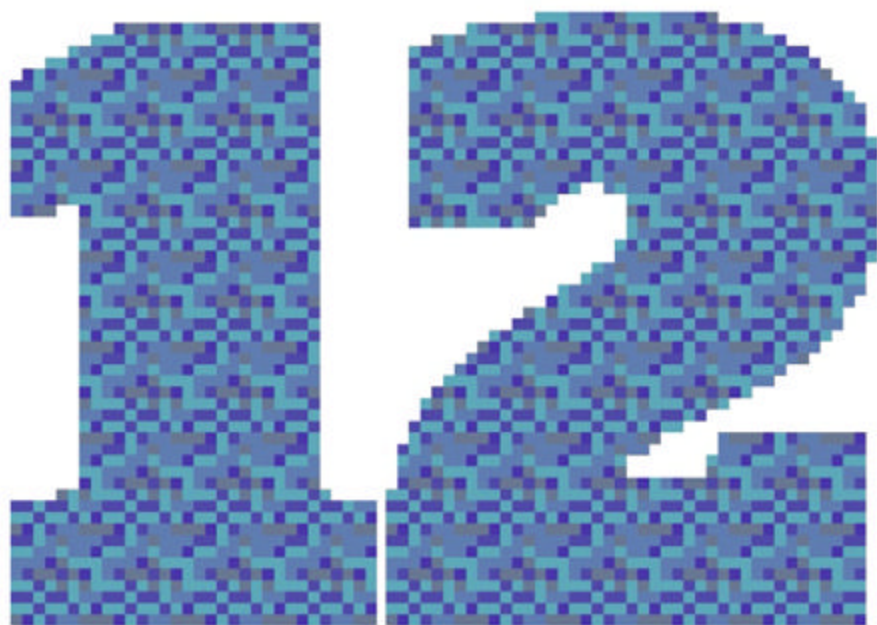
You'll need a silk touch enchantment to harvest packed ice, and, to be honest, its use is fairly limited outside of building materials. It won't melt in sunlight, however.

If you do need to cross an ice plains biome, even if just for exploratory purposes, it's worth setting up bases as you go and taking food with you. There's little to be found here and these biomes are usually fairly expansive.

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THE TOP



MINECRAFT TEXTURE PACKS



Bored of the same old blocks? These are the **MINECRAFT SKINS** every PC player needs to install



The default *Minecraft* textures are charming in their way, but PC gaming isn't about 'default' anything — there's never a bad time to customize your experience. If your blocks are starting to look drab (and after hours and hours of adventuring, they almost certainly will) there are tons of free texture

packs available to revamp *Minecraft*'s look, and they're easy to install.

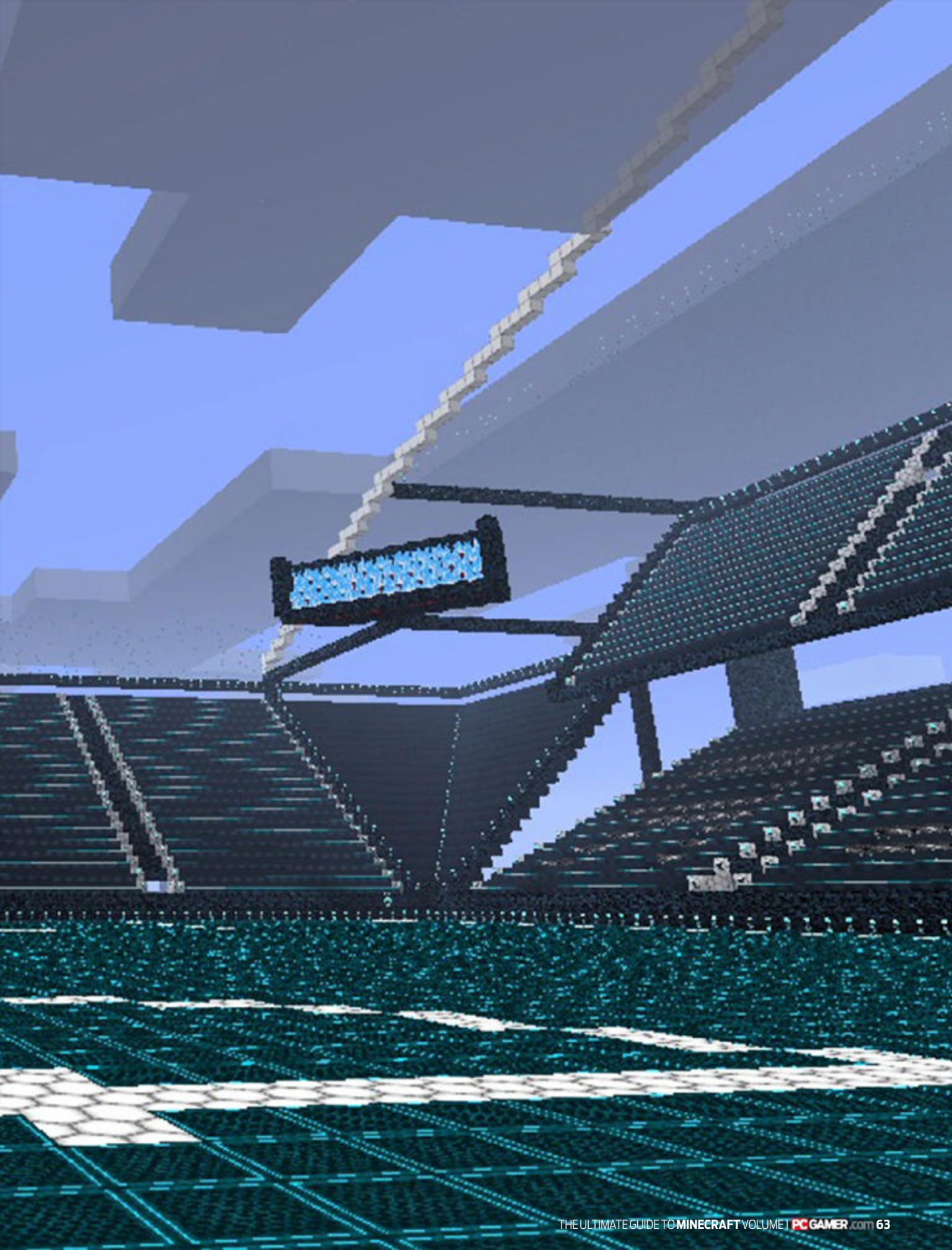
Boot up *Minecraft*, click on the 'Mods and Texture Packs' section, and then click 'Open texture pack folder'. Drop the .zip file from each pack in there and it will appear in the list of textures, ready to launch from the menu—it's as simple as that.

There is one complication, though: some of these textures are higher resolution than the original *Minecraft*, so to use them you'll need

Kahr's HD texture fix (grab it at bit.ly/hdtexturefix). Just download and run the program, hit 'patch', and you're set to play *Minecraft* with any of the glorious high-res textures in this list.

These packs range from straight-up improvements to the game's default look to entirely new notions about what *Minecraft* might look like. Some are radical, others subtle, but every one deserves your attention.

Happy texturing!





1



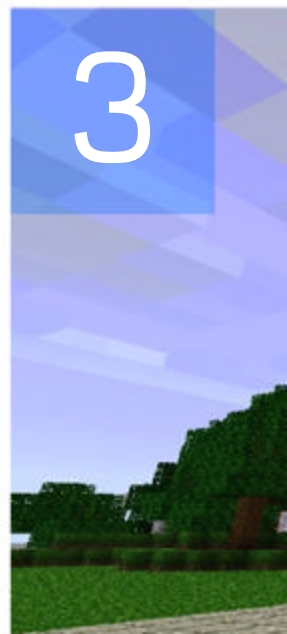
2

OKAMI PACK

Based on the gorgeous Clover Studio/Capcom Zelda-beater, the Okami Pack is undoubtedly one of the most gorgeous re-textures on this list. The Japanese watercolor-inspired look makes it one of the most unique packs out there.

Get it: bit.ly/okmipack

3





1×1 SIMPLICITY

Most people don't look at *Minecraft* and think, "It's good, but I wish the graphics were just a little bit more low-res." MacMCSeverSuport is not most people, so he made 1×1 Simplicity, reducing all

Minecraft textures to their most basic level. It's not just a joke. The simple, flat colored blocks combine to create a strikingly minimalist look all of their own, proving that sometimes less truly is more. [Get it: bit.ly/smplmine](http://bit.ly/smplmine)



PAINTERLY PACK

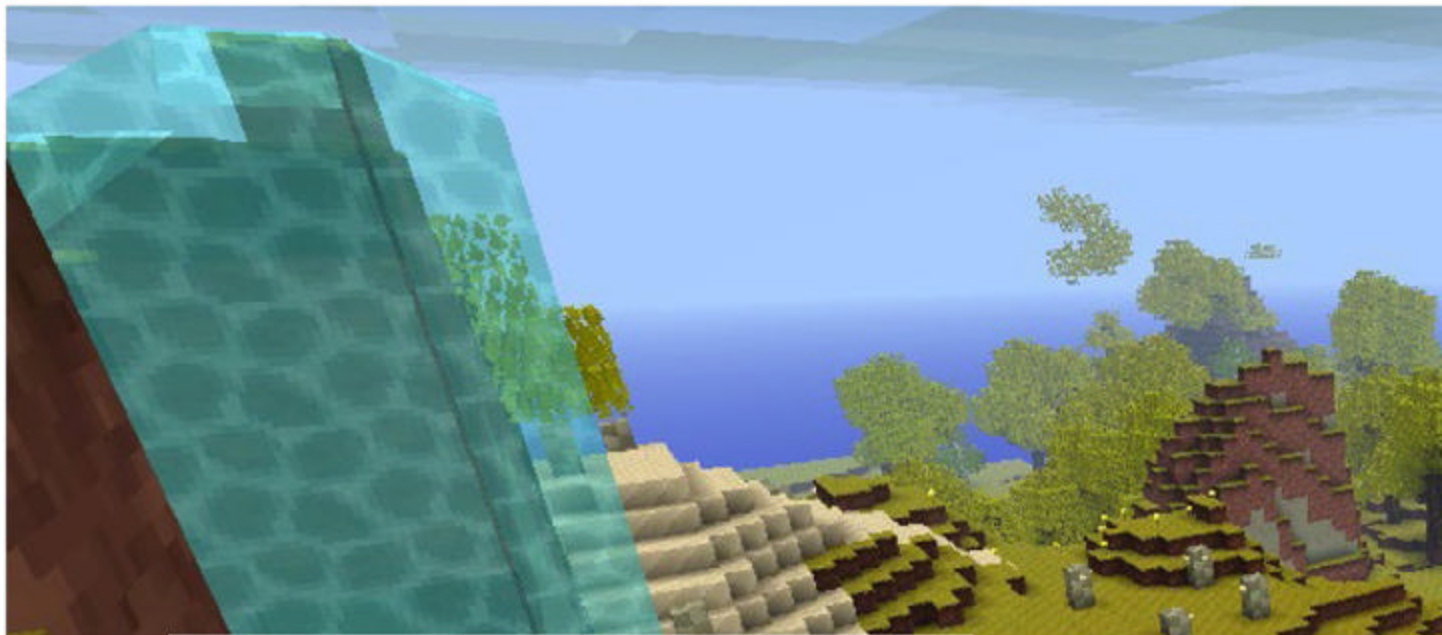
One of the most popular texture packs, Painterly keeps things simple, staying true to the original *Minecraft* style and its native resolution. The result is something that tweaks and improves upon *Minecraft*'s unique graphical style without totally reinventing its pixels. It's perfect for those who already like how *Minecraft* looks, but want just a little more detail. Painterly also goes well with YogBox's *Minecraft* Mods Compilation.

[Get it: www.painterlypack.net](http://www.painterlypack.net)

LB PHOTO REALISM

At the opposite end of the spectrum to the Simplicity skin is Scuttles' LB Photo Realism Pack, which replaces the in-game graphics with high resolution, realistic textures. Since *Minecraft* really isn't built for such high resolution textures it can cause a few problems, but most of them can be solved by allocating Java more memory in Windows.

Get it: bit.ly/photopk



JOLICRAFT

If we were to describe in one word why Jolicraft is good, that word would be 'personality'. While other mods have a clearly defined aim, Jolicraft appears to be dictated entirely by the eccentric personality of its creator, Jolicoeur, who says: "My name means 'Happy Heart', so I guess Jolicraft means

'Happy Craft.' So maybe I should have called it HappyCraft, because I'm generally quite happy." That must be true, because the style of the pack reflects it — light and airy and full of warmth and, most importantly, fun. A cheery new look for your world.

Get it: bit.ly/jolicraft



TOP 12 TEXTURES



BORDERCRAFT

5

Another game-inspired pack, Bordercraft features cel-shaded-esque textures to resemble fan-favorite RPG shooter *Borderlands*.

Get it: bit.ly/brdrcrft





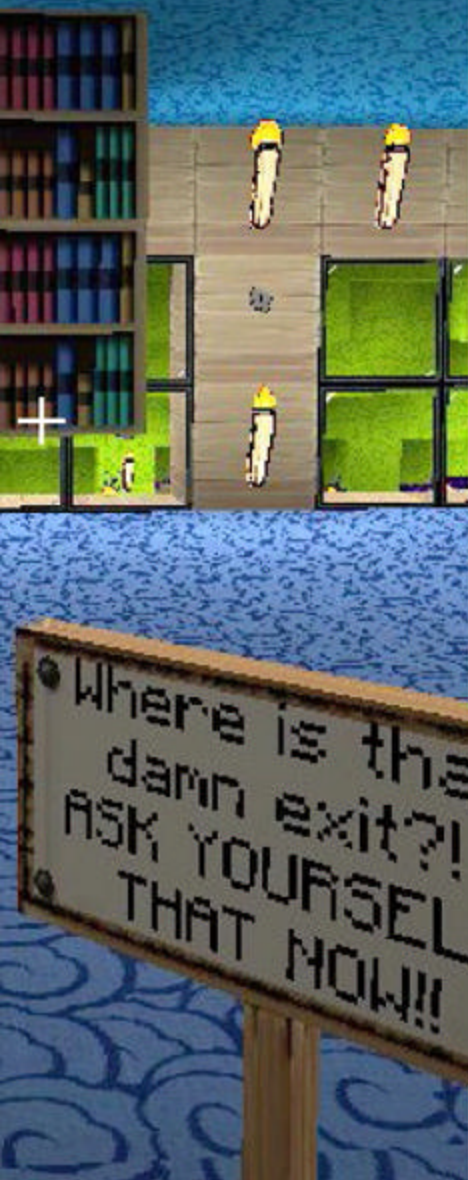
MINECRAFT 4 KIDS

Another cel-shaded pack, this one made by modder Alree who commendably decided to make *Minecraft* a lot less scary for his six-year-old son. *Minecraft 4 Kids* gives the game a bright, clear look and a soft cartoon aesthetic.

We may not be kids, but we're charmed by Alree's sweet, simple textures anyway. Maybe the world isn't such a scary place after all—even with creepers!

Get it: bit.ly/craft4kids

7



8

GLIMMAR'S STEAMPUNK PACK

Minecraft already has a lot of steampunk elements, with the ability to create complex circuits and structures with redstone. So it was inevitable that someone would change the visuals to fit, and Glimmar's Steampunk Pack does a great job.

This re-texture really goes to town, not only adding the desired steampunk textures to landscapes, but replacing

torches with gas lamps, changing armors to fit the aesthetic and even redesigning the player model to sport a magnificent, twirl-it-in-your-fingers moustache. Sensibly, Glimmar has also made the pack compatible with steampunk themed mods, such as Pchan3's wonderful Steampunk Airship. One for fans of brass, monocles and zeppelins. Delightful!

Get it: bit.ly/glimmar

9



CREATIVE ONE'S MEDIEVAL PACK

Creative One is certainly well-named: his Medieval texture pack gives Minecraft a grim, Dark Ages look. Perfect for exploring nasty dungeons, building dark castles and plotting against the rightful king*. *Kings not yet implemented.

Get it: bit.ly/createmed

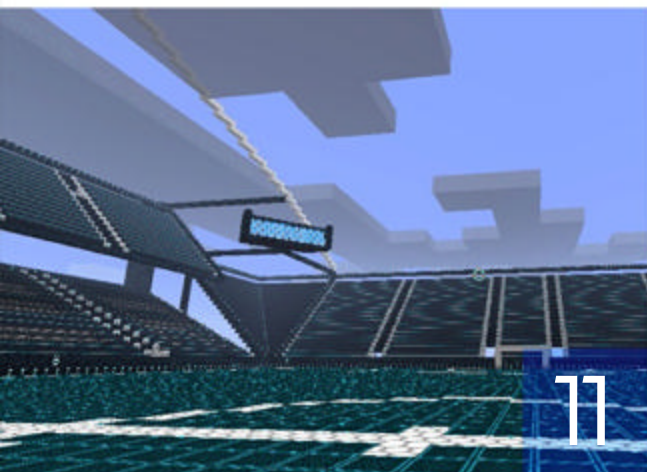
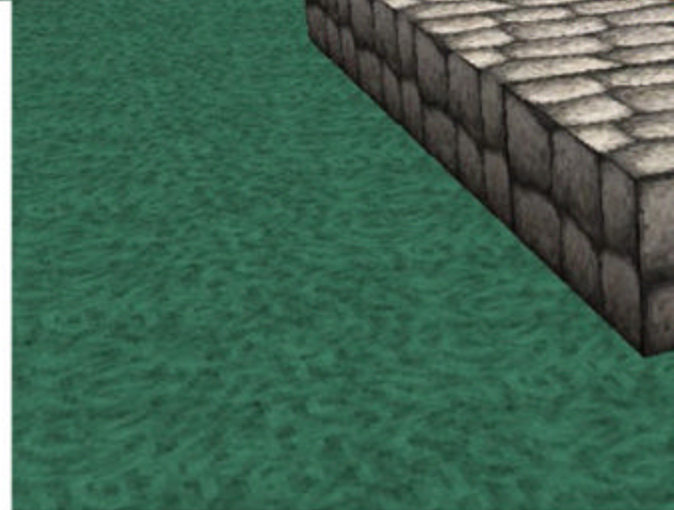


OVO'S RUSTIC REDEMPTION

Community member Ovo created, then abandoned, this pastoral resource pack, and the community has added to it ever since. While not ideal for city-focused worlds, Ovo's Rustic Redemption adds an ornate,

cozy country feel to wilderness and cottages. Almost everything is replaced by this comprehensive pack, with support for armor and an awful lot more coming very soon.

Get it: bit.ly/ovospak



REZCRAFT

Rezcraft is one of the biggest overhauls of *Minecraft*'s visual aesthetic around. It changes the look of the game completely, replacing green landscapes with Tron-inspired glowing lines on dark backgrounds. The retro textures mesh with *Minecraft*'s blocky appearance, turning the whole thing into a stylish vision of '80s cyberspace. How cool is that? Just add Daft Punk's brilliant *Tron: Legacy* soundtrack to your next hardcore mode session, and *Minecraft* becomes something else entirely.

Get it: bit.ly/rezcraft






SIMPLE AS THAT

Minecraft's default texture set uses 32x32 pixel textures. Simple As That takes it lower still: it's a super simplistic 8x8 texture pack that makes *Minecraft* look even more basic and colorful, like a classic platformer.

But even with low-res textures, the pack is packing a surprising amount of detail in its skins, creating bright and lively environments in the process. If your PC struggles with other resource packs, Simple As That can make for a great replacement that won't cause your rig to start throwing wires and belching smoke out of its air vents.

Get it: bit.ly/simplepak

KNOW YOUR BIOMES



No passive mobs spawn here. If something moves, it's probably best to kill it or run away...

Aside from the obvious PvP possibilities cacti offer, as they damage all that touch them, these desert plants can also be used to make cactus green dye.

DESERT



P

ack your sun hat as there are plenty of good excuses to explore these treeless expanses of sand. You'll need food and tools, as

there are no trees or reliable sources of nibbles to be found naturally. There's plenty of sandstone, though, should you want to build a temple of your own.

Villages and desert temples can be found here, the latter leading to vast deposits of valuable loot. Be careful of TNT booby traps, though.

These desert temples contain four chests on the lower floor, each filled with vital loot. Under this floor, however, is a TNT trap, so avoid the pressure plate at all costs!

CHANGE YOUR CHARACTER SKIN



Han Solo

minecraftskins.net/hansolo



Chewbacca

minecraftskins.net/chewbacca



Rebel Pilot

minecraftskins.net/rebelpilot



Darth Vader

minecraftskins.net/darthvader



Pirate Pig

minecraftskins.net/piratepig



Spock

minecraftskins.net/spock



Dr Zoidberg

minecraftskins.net/drzoidberg



Ultramarine

minecraftskins.net/ultramarine

SKIN

Ever wanted to be a Han Solo?
What about Wolverine? Or
Shrek? Now you can!

PAINT JOB

How to install your own character skins.

- 1 Download one or more character skins online (they'll be .png files).
- 2 Log into your *Minecraft*.net account.
- 3 Go to 'Profile'.
- 4 Upload the character skin.
- 5 Launch *Minecraft*!



Biohazard Suit

minecraftskins.net/biohazardsuit



Marty McFly

minecraftskins.net/martymcfly



Shrek

minecraftskins.net/shrek



RoboCop

minecraftskins.net/robocop



Sky Captain

minecraftskins.net/skycaptain



Minion

minecraftskins.net/minion



Fire Mage

minecraftskins.net/firemage



Wally

minecraftskins.net/waldo

DEEP



inecraft's teal-shirted default skin (aka Steve) seems like a nice enough guy, but you're not really

going to explore gaming's most creative and elaborate open-world sandbox looking like that, are you? Personal expression and doing what you want are at the heart of *Minecraft*, and that should certainly extend to what you wear as well. Changing your look is easy. If you can attach a file to an email, you can change

your avatar.

The best part is that you don't have to look hard to find your favourite character—thousands of skins are available online through websites such as www.minecraftskins.net and www.planetminecraft.com. Here we've collected just some of our favorites, but we could easily have filled this entire book with download ideas.

And if you can't find the right skin, why not make your own? You've definitely got the creative juices needed to make a skin you're proud of.



Engineer

minecraftskins.net/tf2engineer



Red Spy

minecraftskins.net/tf2redspy



Policeman

minecraftskins.net/policeman



Agent Chicken

minecraftskins.net/agentchicken



Spider-Pig

minecraftskins.net/spiderpig



Santa Claus

minecraftskins.net/santa



Doom Guy

minecraftskins.net/doomguy



Batman

minecraftskins.net/batman

KNOW YOUR BIOMES



Though usually obtained through trade with villagers, it's possible to find emerald in the wild under the extreme hills biome. Essential for powering beacons.



Silverfish
will burst from
mined stones and
attack you, and it can be
hard to distinguish regular
stone blocks from the
these Monster Egg
variants. Mine with
caution!

EXTREME HILLS

T

here are many flavors
of hill biome in
Minecraft, ranging
from staple grassy
knolls to expansive
plateaus and sharp,
stony cliff faces.

Navigate carefully over these huge
mountain ranges, though, as there are
plenty of health- (and life-) sapping drops
to tumble down. Silverfish and emerald
ore can be found occurring naturally here
and it's worth noting is that there are more
underground caverns under this biome
than any other.





21

AMAZING MODS AND MAPS

Get inspired by these incredible
COMMUNITY CREATIONS on PC



ou've put in hundreds of hours, crafting your masterpiece of a *Minecraft* world. You've survived against

the Endermen, and turned your barren wasteland into paradise. And now it's time for something new.

Hack and slash your way through mobs, find a use for those 46,656 spare strips of rotting zombie flesh, escape a giant apartment building in

the sky, and make your lifesize replica of the Titanic finally float. All that, and more, are here. Mods take *Minecraft* to never-before-imagined places, and while it can be tough to find safe, stable ones, we've picked favourites that we highly recommend you try.

Before you start, install the Forge modloader. Most of these mods work with latest version of *Minecraft*, but check the installation instructions on each item's download page for additional info.



BIBLIOCRAFT

After playing many of the mods included here, you might find yourself burdened with more items than you know what to do with. For that problem, you need BiblioCraft.

It's a mod designed especially for the more literary-minded denizens of the *Minecraft* universe and those who may have a compulsive need to keep their surroundings completely

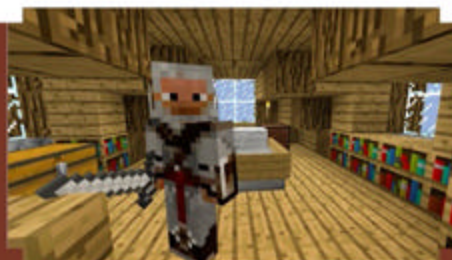
immaculate. Developed after the creator found themselves the owner of one too many tomes, BiblioCraft features seven impressive new types of storage blocks.

It includes a selection of bookcases in various types of wood that can show off up to 16 books, a stand that is capable of displaying an entire suit of armor, a shelf for up to 12 potions, a tool rack that can contain four different tools or weapons, a general shelf for miscellaneous items, a

display case for your trophies and a wooden label to help you identify which chest contains what—because, honestly, with this much stuff, chances are you're going to need the help.

Newer versions have added even more storage items, as well as helpful tools such as a working tape measure and a screw gun that will help you manipulate many of the mod's storage elements. Installing this mod is almost like giving Steve a free shopping spree at Ikea, except you'll never need to use the word 'dowel'.

www.bit.ly/bibliocraft



TALE OF KINGDOMS MOD

■ An adventure mod where you're the king of the kingdom and must prove that you belong in power. One for Game of Thrones fans.

www.bit.ly/gmkingdom



BIOSPHERE MOD

■ Every biome in the game is now encased in giant biospheres. Finding new biomes is easy: all you need to do is look for the huge glass bubble in the sky.

www.bit.ly/gmsphere



SUPER HEROES IN MINECRAFT

Fed up with the harsh, unforgiving scrabble for materials that is vanilla Survival Mode? Super Heroes lets you revel in the power fantasy of mutants, gods, and uber-rich playboys with nothing better to do. It adds new weapons and armor, all enhanced to grant you the powers of Marvel's Avengers superhero squad.

The mod includes The Hulk's pants, for ground-flattening super jumps and a land-tearing Hulk Smash; Iron Man's suit, enabling flight, rockets and rapid-fire bullets; Thor's hammer, which can summon lightning or be thrown for a devastating explosive attack; and Captain America's — er — shield and gun. Okay, maybe not the most exciting superhero, but you can at least throw his shield at mobs for fun.

Each item can be crafted with new recipes and materials, found in the documentation after you install. One quick word of warning: the mod's powers are highly tailored for massive destruction. Saving people isn't quite as feasible, which dents the fantasy somewhat.

www.bit.ly/minehero



COMPLEX MOD

■ A single-player adventure set in a multi-dimensional maze. Reminds us of the classic science fiction flick *Cube*.. It's less horrifying, though.

www.bit.ly/gmcomplex



INFECTION MOD

■ Zombies, zombies EVERYWHERE! *Minecraft* has zombies, yes, but this is George Romero-level stuff. Build smart, or risk losing your brains.

www.bit.ly/gminfec



ARCHIMEDES SHIP MOD

Sure, you can build a simple wooden boat in *Minecraft*. But with the Archimedes Ship Mod, you can turn any structure you build into a ship worthy of your world's seas. And using the mod is simple: use your crafting table, combine four wood planks, four wooden sticks, and an iron ingot into a Ship Marker, the mod's special block that you can add to any structure you build. Then right-click the block to 'sit down' and start sailing.

Controls work just like walking. Use the WASD keys, and it's easy enough to push a boat off the shore and into the ocean. The only issue with the mod is that, while it ignores natural materials, it will include anything else that your boat is touching as part of the boat. When we left our ship sitting too close to our house before activating the marker, we ended up dragging our home with us on our ocean voyage. Whoops!

The upside, however, is that you can make anything you've built sea-worthy with Archimedes — imagine your house floating across the ocean. When used properly, it's a pretty slick little mod.

www.bit.ly/archcraf





REI'S MINIMAP

It's happened to everyone: you wander your world long enough and eventually you'll get lost. Instead of building navigational landmarks, you can use this mod to add a customizable minimap to the game's interface.

Rei's Minimap can sit in any of the four corners of your screen, and includes a gamut of options to tweak. Pressing M brings up a special menu that lets you configure the map's appearance, radar and even navigational waypoints.

It will even generate block colors depending on what custom resource pack you've installed. All this, and the minmap still manages to keep your framerate steady.

www.bit.ly/reimini

FROM ASHES

CTM (Complete The Monument) maps strike a nice balance between the community's traditional adventure and survival creations. More sandbox oriented than the rules-heavy adventure maps, they're nevertheless more detailed and directed than pure survival maps, the most popular of which is basically just a few blocks stuck up in the sky.

One of the best CTM maps is From Ashes, a massive, gorgeously designed world full of tricky dungeons, hidden secrets and unique encounters.

The map is set in a post-apocalyptic world in which you've survived a nuclear holocaust by sailing across the ocean. And to kick it all off, you find yourself shipwrecked and alone on a dangerous and mysterious island.

It's still completely open-world,



letting you break, craft, and build whatever and wherever you please as you discover custom items, mobs and even story scattered through notes and journals.

You're also completely free to choose the order in which you complete the map's ultimate objective, which involves collecting a total of 16 woolen blocks to unlock the atomic shelter hidden somewhere below the island. It's very *Lost*-like, only without the polar bear.

And that's not all. Included with the map you'll find a custom resources pack that changes the game's textures for a most post-apocalyptic feel. It's not quite *Fallout 4* (come on Bethesda—hurry up and announce it, would you?) but while we wait for that From Ashes will keep us coming back. And why not? The mod's creators even recommend a set of custom music to help set an appropriate mood.

www.bit.ly/12tELsq



JURASSIC PARK MOD

■ If you stay perfectly still, it'll never see you. This dinosaur mod is technically more about fossils with Jurassic Park elements, though.

www.bit.ly/gmffoss



PORTAL MOD

■ There are loads of *Portal* and *Portal Gun* mods. We enjoy the now-abandoned *AperatureCraft* the most. The old version is available here:

www.bit.ly/gmportal



KING'S LANDING

There are almost 3,000 buildings in this faithful recreation of George R. R. Martin's fantasy city, as seen in *Game of Thrones*.

Oh, and did we mention that each and every one is fully decorated, both inside and out? The build

quality is so massive in scope that it took 100 people working in teams over four months to complete. Even more amazing is that it's only one part of the group's project: to recreate all of the lands from the *Song Of Ice and Fire* series in blocky glory. The group at WestorosCraft

estimates it's completed 70% of the continent so far, and even plans to add enough content for an open world RPG, with quests and NPCs.

Most of the recreation is only available on the group's server, with limited public access, but you can download the King's Landing portion and sit on your very own Iron Throne today.

Remember to keep all players named Joffrey well away.
www.bit.ly/westcraft



POKEMON MOD

■ Gotta Dig 'Em All! That's how it goes, right? Relive the RPG magic in *Minecraft* with this download. By 'RPG magic' we mean 'force animals to fight'.
www.bit.ly/gmpoke



STAR WARS MOD

■ In a *Minecraft* world far, far away... That world could be much closer than you think! Fall to the block side with this great mod.
www.bit.ly/gmswars



PARANOIA

Command Blocks — first introduced in *Minecraft* version 1.4 — are fast proving to be one of the game's most significant additions. For adventure map makers, they're a huge boon, as proven beautifully by *Paranoia*.

Through the map's automated console commands, players will experience a theme-appropriate

teleportation system, clever puzzles, and a repurposed XP system that ties in-game achievements to the adventure's progress.

But even without this clever behind-the-scenes engine, *Paranoia* is an accomplished adventure.

You play as Michael Estrange, a test participant for a suspicious housing project being held in the sky, which is all powered by an unexplained source.

When strange things start happening around the floating apartments, you must escape your digs and find your way to the secret technology that powers it to uncover the mystery.

The map's author estimates 1-2 hours of gameplay to complete, and the mod also supports an additional player for some co-op fun. *Paranoia* also features respawning points throughout the campaign, in case you get killed. An impressively well-rounded experience.

www.bit.ly/150LgA4



TECHNIC SHADES

■ A facilitating mod that lets you apply shaders to *Minecraft* with ease, for some truly gorgeous shots to show your friends.
www.bit.ly/gmshade



TEAM FORTRESS 2 MOD

■ Need items to help you create your own Team Fortress 2-themed maps? Look no further. Dispensers and teleporters galore.
www.bit.ly/gmtf2

CONDENSED BLOCKS

Here's a handy way to reduce the amount of detritus and clutter that inevitably builds up in your inventory after extended sessions of mining and adventuring. The Condensed Blocks mod takes the idea of *Minecraft*'s gem blocks — where you can compress nine gems of the same type into one block, saving valuable inventory space — and expands it to include many of the incidental materials you can pick up as you travel your world.

For example, laying out nine cobblestone blocks in a crafting table will create a condensed cobblestone block. The mod then goes even

further, letting you condense these condensed blocks, all the way up to extreme condensed cobblestone. Fully stack the extreme blocks and you can fit up to 46,656 cobblestone blocks into a single inventory slot. Forget about the Super Heroes mod: sounds like Steve's already packing super-strength pants.

The mod can condense a huge list of materials: everything from building materials, to food and mob drops, and each one has a brand new custom texture. It also supports a selection of other mods, including Industrial Craft and Railcraft.

www.bit.ly/14n8vIT



GALACTICRAFT

This mod infuses space into *Minecraft*, adding new ores, crafting recipes and planets, but in a wonderfully subtle

way. Instead of just giving you a rocket ship item, Galacticraft asks that you collect and build all the key components of a space mission.

The biggest addition is the NASA workbench, used to craft the various pieces of your spaceship. You'll need a nosecone, rocket fins, heavy plating and, of course, a rocket engine. The mod also adds gear for when you're exploring the endless void, which you'll need when you land on the mod's newly-added moon, complete with a colony of moon villagers. You can even build a space station and live on it!

www.bit.ly/103MMpr



EXTREME WEATHER

Realistic weather mods will mirror the weather outside your house, but we're all about tornadoes and water spouts.

www.bit.ly/gmweath




FLAN'S MOD

An incredible air-combat mod that sends you up into the skies in planes for cloud-based dogfighting. Who needs *Ace Combat*?

www.bit.ly/gmflans

KNOW YOUR BIOMES

A screenshot of a Minecraft ocean biome. In the foreground, a sandy beach curves along the edge of the water. The water is a deep blue. In the distance, there are several small islands with green trees and some structures. The sky is light blue with several white, blocky clouds.

Most easily mined in shallow water, larger deposits of clay can be found in the ocean. Enchant yourself a respiration helm (or build an underground base) to give yourself more time.

If you want squid ink (and by extension, black dye) you'll need to hack a few of these harmless sea creatures into bits. Squid ink can also be used to craft a book and quill, great for keeping in-game journals.

A screenshot from the game Minecraft showing a vast blue ocean under a clear blue sky with a few white clouds. In the distance, there are small islands with green trees and some structures. A green speech bubble is positioned in the middle-left of the image.

Get away from it all by building your own desert island retreat. It's just like being Notch! Well, sort of.

OCEAN

A horizontal bar composed of several small squares in various shades of green and brown, resembling a pixelated texture.

S

o why does ocean exist? Aside from the odd bit of clay and some squids hanging around, ocean is essential for building some of the most fun

'survival island' type maps.

If you do fancy a change of pace try the Archimedes' Ships mod for the PC version, which lets you craft your own ships for high seas adventures. Yarr! Who needs *Assassin's Creed IV: Black Flag* now?



HOW TO

INSTALL MODS

Playing on PC and want to expand your *Minecraft* horizons? Here's how you can safely **MOD YOUR GAME**



loading up a game in *Minecraft* is like stepping foot into a world of possibility. Though the game's open-ended approach

allows for a lot of experimentation and personal strategy, *Minecraft*'s design itself is arguably pretty simple. Luckily, that level of simplicity has made *Minecraft* an ideal target for the modding community, and there are thousands of third-party mods out there that change the game in ways both large and small. It truly takes *Minecraft*'s spirit of personal creativity to remarkable new levels.

Minecraft developer Mojang has yet to build mod

management into the game, and any and all mods are

unofficial add-ons that are wholly unsupported by the game's developer. If you install a mod and something goes awry, it's not their problem, and they cannot provide any level of assistance. As such, there's a certain risk to downloading and installing mods, and we recommend that only advanced users attempt to do so. If you're not comfortable altering files on your computer or can't identify a potential threat (such as malware or a virus) before it strikes, then mods probably aren't for you.

Luckily, installing mods is generally a pretty

straightforward process, and as long as you're diligent about backing up your files, you don't have to worry about losing your created worlds or personal settings if a mod botches your game installation.

Want to inject some flavour into *Minecraft* via mods? Read on.



GETTING MODS

Minecraft mods are everywhere on the internet, and there's a legion of devotees who install and play them—and many who then record videos of themselves installing and playing them. (And many more that then watch and comment on those clips!) Considering how hugely popular the game is, it's no surprise that there's a burgeoning community eager to tweak and enhance the

experience.

It's not difficult to find a stack of mods simply by searching around, but we recommend browsing the 'Minecraft Mods' section of www.minecraftforums.net, where

you'll find a readily updated list of reliable, tested mods that work with your precise version of *Minecraft*. No matter where you download your mods from, however, it's always advised to be very keenly aware of what you're putting on your

computer. Mods don't come in the form of executable files (.exe), for example, so if you wind up with one of those on your system, there's something fishy about it, so be alert. As cool as a certain mod may look or sound, it's better to be safe than sorry when downloading untrusted files onto your PC.

We must stress once more that due to the unauthorized nature of mods and their many origins, you are solely responsible for any unwanted effects that result from downloading and installing any that you may find. Still want to press on? Let's go!



BACKING UP

Since mods are unauthorized game alterations created by third-party (and often amateur) developers, you're taking the risk that the installation process will break your game in some fashion. Maybe you'll see an error message, or even just a black screen. Perhaps your performance will drop dramatically, throttling your framerate and making it impossible to navigate. And, potentially, the changes you make to the game may be irreversible.

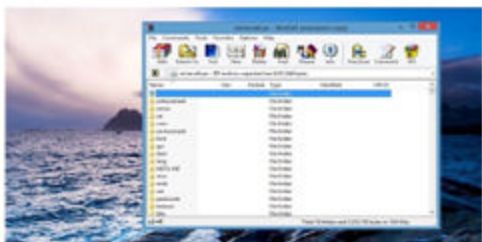
The only way to ensure that you will have a clean, untainted copy of *Minecraft* left on your system is to back up your files in a separate folder. Start by finding the *Minecraft* install directory—searching for '%appdata%' in Windows should reveal the '.minecraft' folder. Copy that folder and place a version somewhere else for safekeeping, such as on your desktop. Now, if you ever need to go back to vanilla *Minecraft*, you can copy the contents of that folder back into '.minecraft' and continue with your un-modded game.

HOW TO INSTALL MODS



INSTALLATION

Many mods can be installed directly into the game by copying files into certain *Minecraft* directories, while some others may require the use of a mod management and installation program, such as Forge or ModLoader. Be sure to consult any installation notes that come with the mod download, or that appear on the website you snagged the mod from—these should give you a hint of what you'll need to complete installation. While this tutorial goes over the general basics and process of installing mods, you'll often see slight variance in how some



must be applied.

In all cases, whether you're directly installing a mod or installing a program used to install mods—it's slightly convoluted, we know—you'll need an unzipping program such as WinRAR (winrar.com) to access the *Minecraft* game files needed to finish the process. Be sure to have that handy to start.

When you have a mod or program ready to install, head to that original 'minecraft' folder from earlier and enter the 'bin' directory. Find 'minecraft.jar' and right-click, then open with WinRAR (or a similar program). Doing so will expand the contents of that single file into many, many smaller folders. It's here that you can copy in the files from the mod or program folder, which in most cases will nearly complete the installation process—unless the specific instructions offers different directions.

Once that step is complete, be sure to delete the 'META-INF' folder within minecraft.jar—this is a crucial step that can derail many mods if ignored.

With that complete, simply exit the window and start up *Minecraft*. If installation was successful, you'll see the results of the mod when you play, or additional options will be available for you to select from. If nothing has changed, or you start encountering errors, replace the contents of your 'minecraft' folder with those of your backup and try again. Search for specific installation instructions or Q&A pages for that mod, as there may be a step that you missed.

In the case of Forge and Modloader, having a mod management program installed makes it incredibly easy to insert supported mods into *Minecraft*. You'll simply be able to download a mod and place the file within a newly created 'mods' folder (or occasionally the 'coremods' folder, as indicated), with the ability to delete the files to erase the mod's effects from the game if you need to. It makes modding much easier for novices, especially when it comes to stacking, or using multiple mods at the same time.

STACKING MODS

Installing a mod is an uncertain process, as you can't be sure whether it'll mess up your game or even be compatible with your version of *Minecraft*. Expectedly, trying to install and use multiple mods at one time is a much more unreliable process, as one third-party modification can disrupt another, causing you even more headaches. Applying multiple mods directly is very much a

trial-and-error process, as each may overwrite certain files and folders, which can then lead to glitches or, worse still, a totally inoperable game.

Still here? Good for you! Luckily, this is the kind of situation that Forge (download it at www.minecraftforge.net) was made for. Just as Forge makes installing individual mods a straightforward process, it also makes managing multiple ones a

breeze. If adding another mod to your game creates chaos, simply delete one of them and try to stack a different set of mods.

Many mods are naturally complementary, as they may be designed to alter and affect different parts of the *Minecraft* experience. For example, if you wanted to stack mods that respectively added better inventory control, a constant mini-map in the corner of the screen, and a larger array of biomes throughout the world, there's a good chance that those will stack well.

In many cases, mod creators allow their work to be included in mod bundles that are designed to play nice with each other. Such packs are a much easier way to install a bunch of mods at once and find the ones that best fit your play style.

But whether you're installing one mod or a dozen, there's always a chance that something will go wrong. It's kind of like playing with fire, except the risk can be rather miniscule if you keep a backup to hand.



JOB DONE

Player-created modifications can dramatically increase the lifespan of *Minecraft* and supercharge time-faded interest.

Perhaps you're seeking more interesting dungeon encounters? Additional tools to help you explore the land? Or even higher-resolution textures to add some gloss to the experience? Maybe you want to see Sonic the Hedgehog as viewed through a fan-made *Minecraft* lens? In some cases, mods can make *Minecraft* feel very different from the original game. Firearms might seem like a strange addition, for example, but there's also



something satisfying about blasting blocks to bits.

Installing mods requires quite a bit more initiative than simply downloading and playing *Minecraft*, and with no official support, you'll more than likely hit a snag or two along the way. Luckily, the

Minecraft modding community is incredibly active and supportive, and if you have any questions you can likely find an answer with enough digging (ha!) around or, alternatively, ask on the main forums.

Check out our list on page 78 to get started.



MESA



ncredibly rare, mesa biomes are home to red sand, hardened clay and stained clay blocks. Stained clay blocks are available in the

same 16 colors that wool blocks are, so make a great alternative building material. If you manage to find the even rarer bryce variant mesa biome then you'll be treated to expansive views of hardened clay spires. These structures are inspired by the real life Bryce Canyon, in Utah, USA.

The mesa biome is, in many ways, quite similar to the desert biome. Of course, this blue stuff isn't helping us to reinforce that claim, is it now?



Dyed clay is a more reliable crafting material than dyed wool. Also, it won't catch fire when struck by lightning.

Though the stained clay spawning naturally in mesa comes in 16 colors, you'll have to gather some hardened clay to dye yourself should you want to get a specific color combo.

THE BEST OF THE REST

Still after more mining and crafting? See the competition and why you'll love it.



1 Terraria

Created by just one man, this 2D platforming crafter was initially dismissed by *Minecraft* devotees as a pixelated clone of their genre-defining

voxel boxer. Anyone who's actually spent some time in *Terraria* will find that it offers up a very different experience. In fact, in some ways it offers a better adventuring experience. The randomised worlds are

vast but also filled with detail. Traditional game elements such as dungeons and even boss fights can be discovered. Whereas it's easy to become detached from the world of *Minecraft* as you heartlessly scour its surfaces for resources, there's a more palpable sense of achievement through discovery in *Terraria* as you unearth

hugely differing biomes and, most brilliantly, treasure chests stuffed with luscious loot.

And we're not just talking new swords or boots, either. From laser blades to jet boots, every facet of your character can be tweaked in diverse and exciting ways.

Best for: dungeon crawling, loot hoovering and depth plumbing.

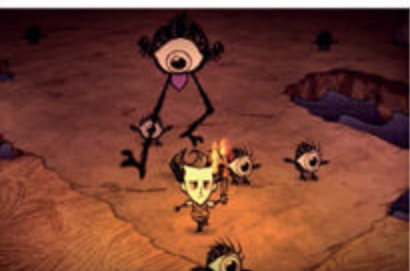
2 Don't Starve

It'll surprise you how quickly you become an expert at survival in this permadeath extravaganza. By about the fourth time snuffing it you'll have figured out how best to deal with immediate problems like hunger, sleep and encroaching beasts. Playing as gentleman scientist Wilson, you'll have clocked that rabbits

can be caught in straw traps, grass can be fashioned into makeshift sleeping mats and that, with the aid of a science machine, you're able to craft basic weaponry.

One minute you're relying on indigenous pig-people to save your bacon from a marauding menagerie of spiders. The next you'll have unknowingly summoned a giant tree-man who hunts you down in the plight for splintery vengeance for his uprooted kin. One thing's for sure, though: you'll have to have all your wits about you to make it through winter in one piece. Get ready to fail a few times. Make that a lot of times, actually.

Best for: extreme survivalists and horrible heartbreak.





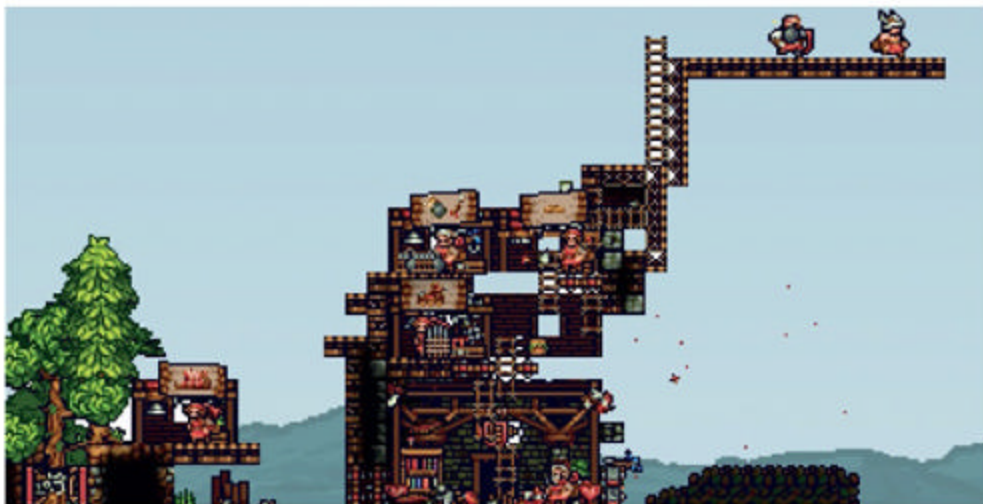
3 Starbound

If *Terraria* is *Minecraft* in two dimensions then Chucklefish's sci-fi outing is *Minecraft* in two dimensions in space. While it's still technically in Early Access on PC, this is already an incredibly accomplished, highly polished survival-crafter in its own right. With nought but your fuel-less ship and a matter manipulator (that's a space age pickaxe to you and us) you have to make a place for yourself among the seemingly infinite possible planetary systems across a procedurally-generated galaxy.

The sci-fi slant means you'll not just be crafting typical bows

and arrows, at least not for long. There are huge varieties of pixelated blood-letters to load up your arsenal with, from plasma ball-firing hammers, to pew-pew laser pistols. You'll be thankful, too, as the indigenous life you'll meet across the many worlds you visit are similarly diverse. You may come across sentient ape people setting up an ominous underground laboratory. There might be bulbous rhino type creatures that charge at you at a moment's notice. Already worthy of your attention, this is also one to watch for the future.

Best for: sci-fi combat, delving into the unknown.



4 King Arthur's Gold

A keen PvPer? Then you will most definitely want to check this stab-happy game out. While there are a series of single player focused stages, these act almost like a tutorial (albeit a fun one) next to the meat of the game proper. Across a destructible 2D arena you and your team of fellow crafters will

need to work together in order to gather resources and construct a stronghold. This while defending against—and of course attacking—the enemy team. The word 'chaos' does not do *KAG* justice.

Each of the roles that you take on in a match lean towards different styles of play. If you love to build, for example, you'll obviously want to jump in as a

Builder. Fancy your luck in the ring? Archers get access to long range weaponry and skills while Knights can get in close for the kills or hold a foe at bay with their shields.

It'll take a while to get the hang of things, but delve in with the intention of learning and you'll have a great time.

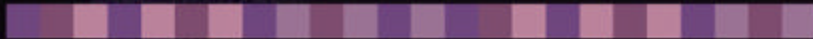
Best for: ridiculous player-on-player violence.

THE END




he ultimate challenge for vanilla Minecraft survivalists, The End biome is as hard to reach as it is to survive... almost. To

get there you'll need to search out a Stronghold in the Overworld—best done by flinging an Eye of Ender into the air and following its airborne trajectory. Once you find a Stronghold and the Ender Portal that resides within, you have to activate it with 12 more Eyes of Enders to reach The End. There's no day/night cycle here, and aside from a massive increase in Enderman spawns you also have an Ender Dragon to contend with.



To avoid Ender-men equip a pumpkin head to cover your crosshair and avoid looking at them.

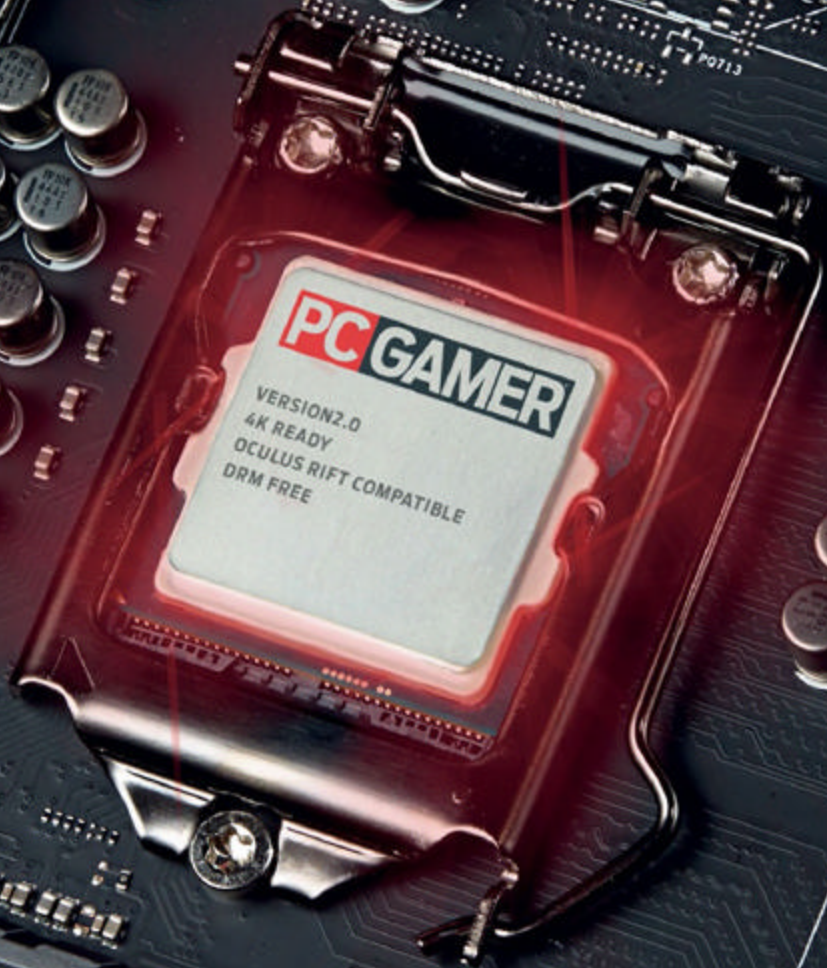


The Ender Dragon's health bar, visible as soon as you enter The End, replenishes whenever it flies by these pillars. Best take them out before tackling the scaly main course.

The End is a floating island made up of end stone. This durable building material can't be stolen by Endermen, making it ideal building material.

We've upgraded

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